

**PORT VALLEY**  
**HIGHWAY 180 SCENIC CORRIDOR**  
**AREA PLAN**



**A Community-Based Local Area Plan**  
*Coconino County, Arizona*







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**HIGHWAY 130 SCENIC CORRIDOR**  
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The final draft plan was approved by the Fort Valley Planning Committee on April 20, 2011 and the Coconino County Planning and Zoning Commission on May 31, 2011. It received final approval and was adopted as an amendment to the *Coconino County Comprehensive Plan* by the Board of Supervisors on July 12, 2011.

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# CONTENTS

|            |  |           |   |
|------------|--|-----------|---|
| <b>iv</b>  | <b>ACKNOWLEDGEMENTS</b>                        | <b>33</b> | <b>UTILITIES AND SOLID WASTE DISPOSAL SERVICES</b>        |
| <b>vii</b> | <b>EXECUTIVE SUMMARY</b>                       | <b>33</b> | Utilities   |
| <b>ix</b>  | Guiding Principles and Vision Statement        | <b>35</b> | Solid-Waste Disposal                                      |
| <b>ix</b>  | Important Issues                               |           |   |
| <b>xii</b> | Implementation and Use of Plan                 | <b>37</b> | <b>TRANSPORTATION</b>                                     |
| <b>1</b>   | <b>INTRODUCTION</b>                            | <b>38</b> | Regional Planning Issues: Highway 180                     |
| <b>1</b>   | Purpose and Scope                              | <b>40</b> | Alternative Modes of Transportation                       |
| <b>2</b>   | Planning Background and Process                | <b>41</b> | Existing Road System                                      |
| <b>2</b>   | Implementation and Use of Plan                 | <b>42</b> | Road Improvements   |
| <b>3</b>   | Guiding Principles                             | <b>43</b> | Road Maintenance  |
| <b>4</b>   | <b>VISION STATEMENT</b>                        | <b>45</b> | <b>OPEN SPACES, NATURAL AREAS, AND OUTDOOR RECREATION</b> |
| <b>7</b>   | <b>NATURAL ENVIRONMENT</b>                     | <b>46</b> | Open Spaces and Natural Areas                             |
| <b>7</b>   | Climate  | <b>46</b> | Parks   |
| <b>8</b>   | Landforms                                      | <b>47</b> | Recreation  |
| <b>9</b>   | Air Quality                                    | <b>50</b> | Trails  |
| <b>10</b>  | Dark Skies                                     | <b>51</b> | <b>COMMUNITY CHARACTER</b>                                |
| <b>10</b>  | Soundscape                                     | <b>52</b> | Gateway Corridor  |
| <b>10</b>  | Soils  | <b>53</b> | Cultural Resources  |
| <b>11</b>  | Vegetation                                     | <b>56</b> | Fort Valley Historical and Cultural District              |
| <b>15</b>  | Wildlife                                       | <b>56</b> | Scenic Resources  |
| <b>16</b>  | Environmentally Sensitive Lands                | <b>58</b> | Residential Design  |
|            |  | <b>59</b> | Commercial Design   |
| <b>17</b>  | <b>WATER AND WASTEWATER</b>                    | <b>61</b> | <b>GROWTH AND DEVELOPMENT</b>                             |
| <b>18</b>  | Regulatory Framework                           | <b>62</b> | History   |
| <b>18</b>  | Water Sources, Quantity, and Conservation      | <b>63</b> | Current Land Use  |
| <b>20</b>  | Water Quality and Wastewater Disposal          | <b>65</b> | Residential Use   |
| <b>21</b>  | Storm-Water Management                         | <b>66</b> | Commercial Use in Residential Zones                       |
| <b>23</b>  | <b>PUBLIC SAFETY</b>                           | <b>67</b> | Commercial Use in Commercial Zones                        |
| <b>23</b>  | Wildfire Management                            | <b>68</b> | Public and Semi-Public Use                                |
| <b>25</b>  | Other Natural Hazards                          | <b>69</b> | Future Growth and Development                             |
| <b>26</b>  | Fire Protection and Emergency Medical Response | <b>70</b> | Zoning Enforcement  |
| <b>29</b>  | Law Enforcement                                | <b>72</b> | <b>APPENDIX A</b> <i>Design Review Overlay Guidelines</i> |
| <b>30</b>  | Traffic Safety                                 | <b>76</b> | <b>APPENDIX B</b> <i>Glossary</i>                         |
| <b>31</b>  | Animal Management                              | <b>79</b> | <b>APPENDIX C</b> <i>Community Survey</i>                 |

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Members of the Planning Committee devoted considerable personal time, meeting twice a month for two years to ensure that this plan reflects the values of their community. Many other residents and property owners contributed by sharing their ideas, thoughts, and perspectives through meetings and surveys.

A special thank you goes to committee member John Vankat who spent many additional hours providing writing assistance and editing this area plan.

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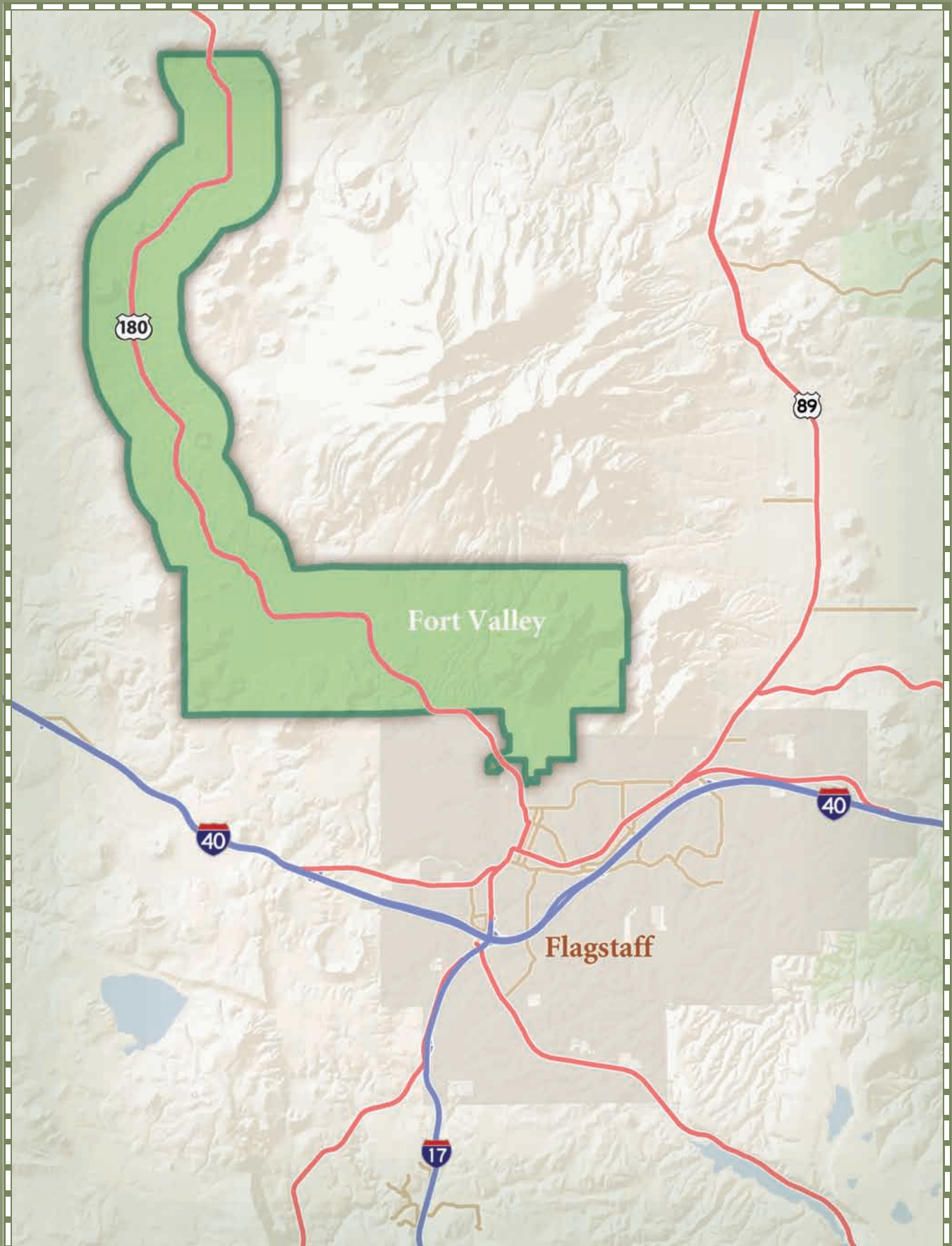
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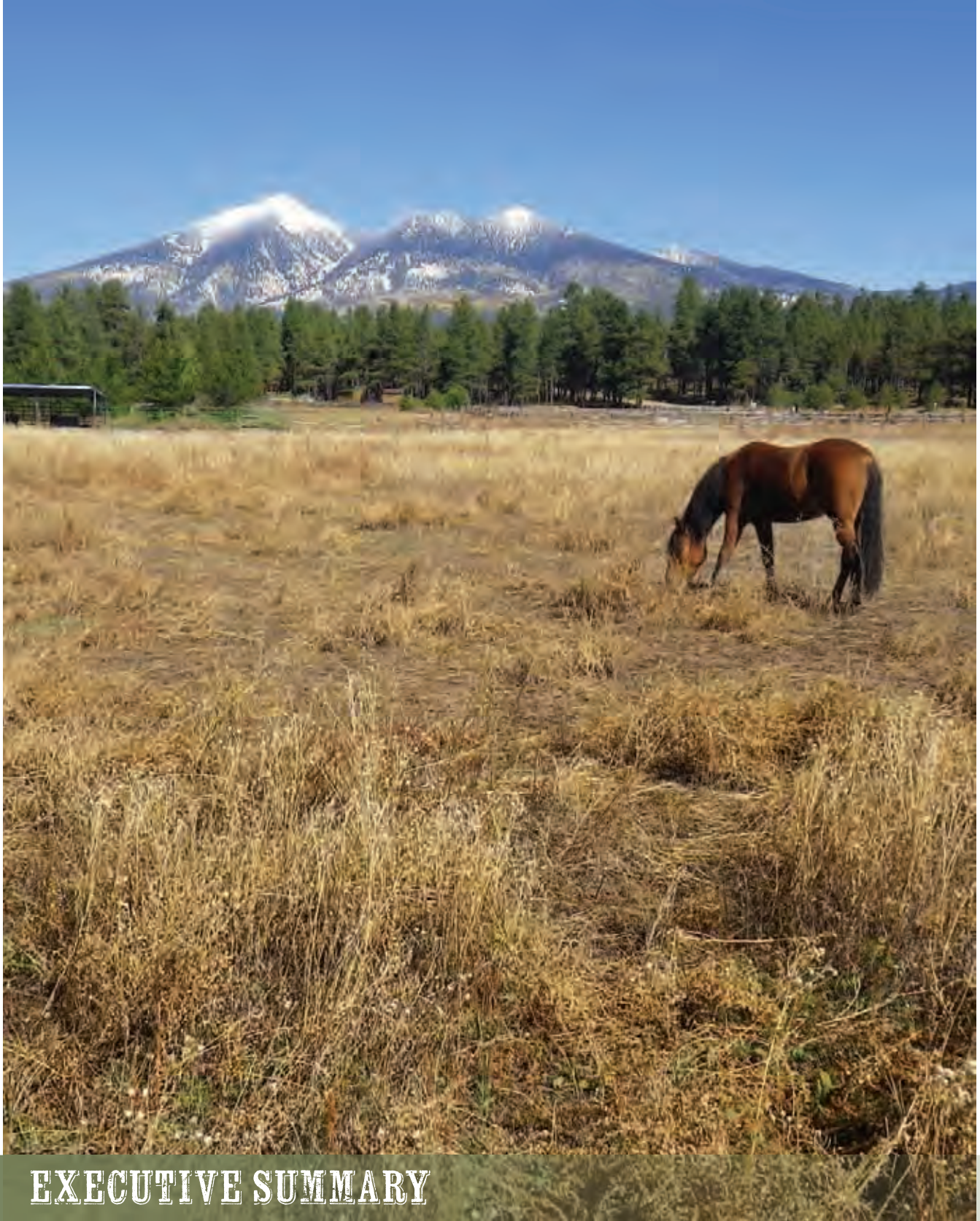




# FORT VALLEY AREA PLAN







## EXECUTIVE SUMMARY

The Fort Valley Highway 180 Scenic Corridor Area Plan is an amendment to the Coconino County Comprehensive Plan. It provides policy guidance for future development in this unincorporated community. While the Coconino County Comprehensive Plan contains general goals and policies that are applicable County-wide, this area plan is tailored to specific conditions in the Fort Valley Highway 180 Scenic Corridor. This is an update of the first Fort Valley Area Plan adopted in 1990 and supersedes it.





A diverse Planning Committee comprised of twelve residents and property owners and representing the community was appointed by the Coconino County Board of Supervisors to work with County planning staff to formulate guiding principles and a vision statement, identify and describe planning issues, and develop specific goals and policies. Background research to gather information for the area plan included presentations from various local authorities including representatives from agencies such as Arizona Department of Transportation, Coconino County Public Works Department, and Coconino National Forest. Research also included an inventory of land uses within the planning area.

The overriding concern of the Planning Committee was the quality of life of residents and property owners, as well as visitors. Maintaining the aesthetic qualities of this rural area is exceedingly important to the public. Moreover, some have expressed the desire to maintain an independent lifestyle without excessive regulation from the County. This area plan seeks to support this, while ensuring that individual lifestyles do not adversely affect other residents and property owners. To achieve a desirable balance, the Planning Committee sought public input by several means, including a lengthy opinion survey of property owners, open invitation for the public to attend committee meetings, and invitations to attend special public meetings to review and provide feedback on plan direction and completion.



The Planning Committee identified major planning issues and organized them into eight topical sections (elements) that generally follow the format and structure of the Coconino County Comprehensive Plan. Each section begins with an introduction and a vision statement and is divided into subsections, nearly all of which conclude with a goal and recommended policies related to the topic of the subsection.

The goals and policies are intended to enhance the positive characteristics of the community as envisioned by property owners and residents of the planning area. The goals provide general direction for the County's decision-making and other actions, and the policies state specific means to accomplish the goals. Many of the policies encourage the County, other entities, and the public to voluntarily pursue improvements within the planning area. No policies require retroactive improvements or changes to personal properties.

### **GUIDING PRINCIPLES AND VISION STATEMENT**

Guiding Principles and a Vision Statement set the tone for this area plan. The Planning Committee developed these by focusing on the special qualities of the Fort Valley Highway 180 Scenic Corridor that are valued by the community. The Guiding Principles are based on the conservation framework set out in the Coconino County Comprehensive Plan, as well as Aldo Leopold's Land Ethic; they emphasize sustainability. The Guiding Principles are presented in three categories related to sustainability: ecological, social, and economic. The Vision Statement outlines the future of the planning area desired by the public. The Vision Statement focuses on healthy interrelationships with the natural environment, safe efficient transportation, enhanced community character, and beneficial future growth and development.

### **IMPORTANT ISSUES**

**Natural Environment.** This section of the area plan describes the natural environment and how it influences development. Because the natural environment is highly valued by the public, the goals and policies of this section focus on environmental protection. Specific important issues include improvement of air quality by reducing smoke from wood stoves and dust from construction and roads, limitation of lighting to protect dark skies, protection of natural quiet from noise from roads and other sources, reduction of construction impacts on soils, management practices used in Coconino National Forest, maintenance of native vegetation, reduction of non-native plants, maintenance of wildlife corridors and habitat, and reduction of impacts on environmentally sensitive lands, especially floodplains and other wetlands.

**Water and Wastewater.** The availability and quality of water within the planning area is a significant concern for residents who must either haul water or maintain private wells and have individual wastewater treatment systems. Moreover, the conflicts of maintaining wells and wastewater systems in conjunction with floodplains and high ground water pose unique constraints on development and living in the planning area. This section includes detailed information on the regulatory framework, water sources and their quantity and quality, water conservation and disposal, and storm water management. The goals and policies focus on protecting and conserving existing water sources, improving water quality and wastewater disposal, and reducing contaminants in storm-water runoff—all of which are critical to the health and welfare of the community.

**Public Safety.** Safety is paramount to the public. This section addresses prevention and protection from natural and human-caused events that endanger safety. It also provides information on wildfires, other natural hazards, fire and emergency medical response, law

**Natural Environment**

**Water & Wastewater**

**Public Safety**

**Utilities & Solid-waste Disposal**

**Transportation**

**Open Spaces, Natural Areas,  
& Outdoor Recreation**

**Community Character**

**Growth & Development**





*Photos courtesy of Fort Valley Experimental Forest.*



enforcement, traffic safety, and animal management. The goals and policies focus on reducing the risk from natural hazards, improving services, and increasing the safety and well-being of residents and visitors. More specifically, reducing the risk of catastrophic wildfire is critical, because such fire would threaten public health and safety, result in losses of homes and infrastructure, change wildlife habitat, reduce recreation opportunities, and alter scenic vistas. As experienced in other parts of the County, large intense fire would alter the planning area for generations. The Summit Fire District provides fire protection and emergency medical response for most of the planning area. However, a similarly rapid response by law enforcement is not currently present, because the planning area lacks a community deputy who would not only enhance public safety but facilitate communication and resolution of problems within the community.

**Utilities and Solid-Waste Disposal.** This section not only promotes provision of utilities but also seeks protection of the aesthetics of the planning area, as for example in placing utilities underground. In addition, this section applies principles of sustainability to solid-waste disposal through encouragement of reduced consumption, increased reuse, and availability of community-wide recycling.

**Transportation.** Except for Highway 180, the existing road system of the planning area reflects the rural nature of the community, with many roads being unimproved and privately maintained. This section addresses issues of transportation safety, promotes the expansion of alternative modes of transportation (bicycles, etc.), and encourages road maintenance and improvement. Included is an overview of issues pertaining to winter traffic congestion that results from snowplay activities in or near the planning area (this important topic is also addressed in Public Safety and Open Spaces, Natural Areas, and Outdoor Recreation). Although the Planning Committee discussed winter traffic congestion at length, ultimately no attempt was made to resolve the issue because the Committee recognized that a regional, broad-based approach is needed and is being pursued by other governmental entities. However, one possible solution to winter traffic congestion garnered considerable attention within the planning area community: construction of a road linking Highway 180 to Interstate 40 and bypassing the City of Flagstaff. Finding a suitable location for a bypass road that is acceptable to residents and property owners of the planning area is a major obstacle because any bypass would negatively impact nearby residents, as well as natural features such as wildlife. In the absence of a specific proposed route to consider, the Planning Committee did not attempt to develop policies in relation to a bypass road.

**Open Spaces, Natural Areas, and Outdoor Recreation.** These are some of the most distinctive and important features of the planning area. Although goals and policies designed to preserve and enhance the scenic qualities of the planning area are expressed throughout this plan, this section specifically addresses protecting and maintaining open spaces and natural areas, providing a variety of recreational opportunities including parks, enlarging and maintaining a trail system with regional linkages, and minimizing negative impacts of recreation on residents and the environment.

**Community Character.** The character of the community is a composite of many different factors, including natural and cultural resources. This section describes and seeks to protect various aspects of community character. Desired outcomes include enhancing Highway 180 as a gateway to Grand Canyon National Park and the City of Flagstaff. As part of this enhancement, the Planning Committee advocates a Fort Valley historical and cultural district to encompass historical structures and cultural institutions where the planning area and the City of Flagstaff meet. In addition, protection of archeological, other historical and scenic resources is encouraged as essential aspects of community character. This section also seeks to maintain and enhance residential design and to integrate commercial design with the aesthetic character of the planning area.

**Growth and Development.** This section provides information on the history and trends of growth and development in the planning area. Although there has been significant growth since the adoption of the 1990 area plan, an ample supply of land remains for both residential and commercial development. Maintaining the aesthetic qualities of this rural area in terms of residential and commercial development is important to the community. There is little desire for future increases in residential densities or adding new commercial areas. Instead, the community prefers subdivisions that respect the rural character of the

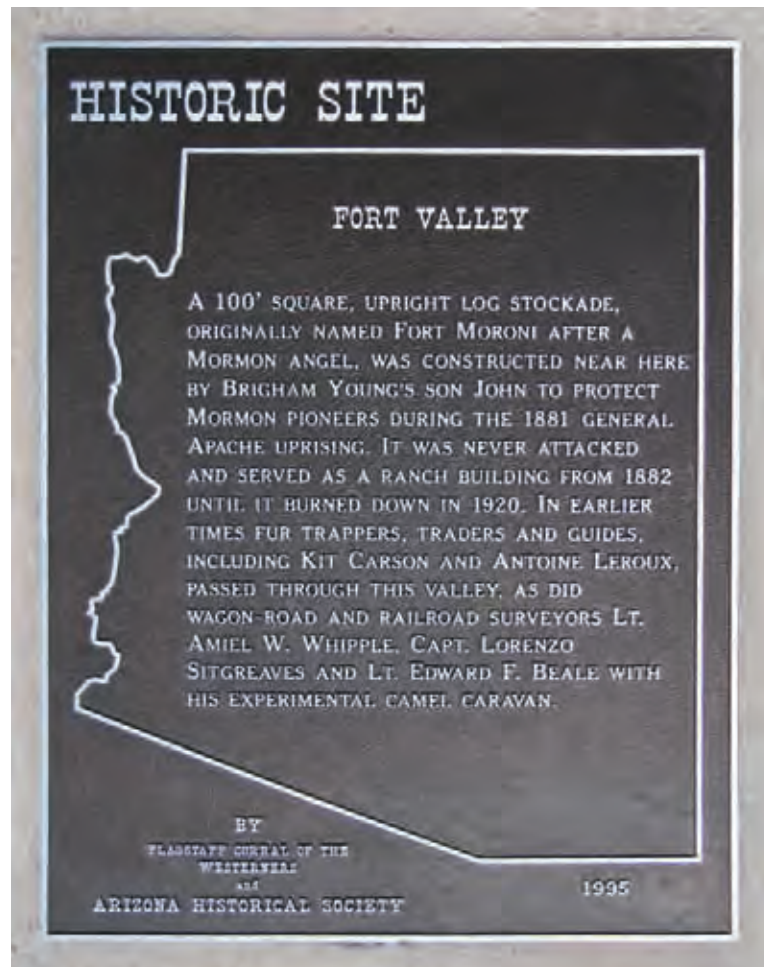


area and commercial uses that are compatible with adjacent residential properties. Therefore, the goals and policies of this section focus on how best to incorporate new development within the existing community. This section is supplemented by Appendix A, Design Review Overlay Guidelines, which presents a means to protect and enhance the aesthetic qualities of the planning area; it applies only to new and redeveloped multiple-family, commercial, industrial, and public and semi-public uses.

### IMPLEMENTATION AND USE OF PLAN

With adoption by the Coconino County Board of Supervisors, this plan is part of the Coconino County Comprehensive Plan and serves as the official guide for future development in the Fort Valley Highway 180 Scenic Corridor. The Coconino County Zoning & Subdivision Ordinances contain provisions that decisions made by the Board of Supervisors and by the Planning and Zoning Commission must be consistent with the Comprehensive Plan and the local area plan. Requests for projects that are inconsistent with either plan must be accompanied by a request to amend the plan(s) or be denied. This area plan also lists action items to assist the Board of Supervisors in setting program priorities for the various departments within the County (Appendix B). Most of the action items, if pursued by the Board of Supervisors, will require further public participation to ensure they adequately reflect community concerns. The Planning Committee has agreed to reconvene as needed in the future.

Commemorative plaque identifying the historic fort location on Lake Trail.







# INTRODUCTION

## PURPOSE AND SCOPE

The purpose of this area plan is to guide development in the Fort Valley Highway 180 Scenic Corridor for at least the next ten years. This is to be accomplished by providing a vision and consequent expectation of future conditions through establishment of policies desired by area property owners and residents. Protection of community values is the highest priority and has guided the development of goals and policies throughout the planning process. The area plan identifies community challenges, such as limited water resources and environmentally sensitive lands, along with policies to address them. Opportunities for protection of valued resources and residential and economic development are described. The plan is an amendment to the Coconino County Comprehensive Plan and therefore highlights the ecological principles and conservation-based planning efforts that guided many of the goals and policies of the greater county.

The Fort Valley Highway 180 Scenic Corridor Planning Area is located northwest of the City of Flagstaff, near the base of San Francisco Mountain, commonly known and hereafter referred to as San Francisco Peaks. The planning area includes all private and public lands along Highway 180/Fort Valley Road from the city limits of Flagstaff to Kendrick Park, except the Hart Prairie area, whose residents opted not to be included. Highway 180 is the primary arterial for all portions of the planning area and is recognized by the State of Arizona as a Scenic Road for travel to Flagstaff, the Grand Canyon, and recreational sites in Coconino National Forest. The planning area includes three non-contiguous areas of residential and commercial development: South Fort Valley, Fort Valley, and Kendrick Park. South Fort Valley includes Lockett Ranches, Colton Ranch area, Mount Elden Lookout Road, Schultz Pass Road, Dry Lake Hills, the Magdalena/Van Sickle area, Forest Hills, and Hidden Hollow. Fort Valley includes Fort Valley Ranch and properties on both sides of Highway 180 between Snow Bowl Road and Bader/Round Tree Roads. Kendrick Park is at the northern end of the planning area and encompasses a relatively small in-holding of private land surrounded by Coconino National Forest. The corridor connecting these areas is two miles wide and centered on Highway 180.

## PLANNING BACKGROUND AND PROCESS

The original Fort Valley Area Plan was adopted by the County Board of Supervisors on February 20, 1990. Local conditions had changed sufficiently since then to justify a thorough review and update, including new goals and policies.

On March 24, 2009 the Coconino County Board of Supervisors appointed a Planning Committee of twelve residents and property owners to represent the community and update the 1990 Fort Valley Area Plan. Planning Committee members had diverse interests. The Planning Committee and Coconino County planning staff began meeting in April 2009 and typically met twice a month to develop this area plan. The first action was to identify the planning area, and the committee decided to expand the boundaries of the 1990 plan to include Kendrick Park, the Highway 180 corridor, and the Dry Lake Hills area. Through a series of exercises led by Coconino County planning staff, the committee identified planning issues and drafted a vision statement that reflected community desires for the future. An outline was drafted that included many of the sections of the Coconino County Comprehensive Plan, such as the natural environment, water resources, public safety, community character, and land use.



The overriding concern of the Planning Committee was the quality of life of residents and property owners, as well as visitors. Maintaining the aesthetic qualities of this rural area is exceedingly important to the public. Moreover, some have expressed the desire to maintain an independent lifestyle without excessive regulation from the County. This area plan seeks to support this, while ensuring that individual lifestyles do not adversely affect other residents and property owners. To achieve a desirable balance and ensure that the needs and desires of the greater community were understood and represented, the Planning Committee developed a lengthy public opinion survey on land uses, patterns, and issues (see Appendix C, Community Survey). It was mailed to every owner of property within the planning area, as well as Hart Prairie property owners, to solicit opinions to guide the planning process. After review and analysis of the responses, the committee revised the draft vision statement and plan outline and held a community meeting on August 26, 2009 to solicit feedback.

The committee then hosted a series of presentations by local authorities on various topics related to planning issues. These local authorities included representatives from Arizona Game and Fish, Coconino National Forest, Arizona Department of Transportation, Flagstaff Metropolitan Planning Organization, Greater Flagstaff Forest Partnership, a local historian, Summit Fire District, a renewable energy consultant, Flagstaff Cultural Partners, Museum of Northern Arizona, the Pioneer Museum, the Grand Canyon Trust and Flagstaff Arts and Leadership Academy. Community members were invited to these and all other committee meetings (many meetings included members of the community who were not on the committee). After these presentations were completed, the committee continued meeting to draft this planning document, including text, goals, and policies. Typically, individual sections of the plan were drafted by County planning staff for thorough review and revision by the committee. Regular committee meetings occurred through April 2011, when a draft plan was completed and approved by the committee. A second community meeting was held on May 11, 2011 to receive feedback on the draft plan.

## IMPLEMENTATION AND USE OF PLAN

With adoption by the Coconino County Board of Supervisors as an amendment to the Coconino County Comprehensive Plan, this area plan serves as the official guide for future development in the Fort Valley Highway 180 Scenic Corridor. It supersedes the 1990

Fort Valley Area Plan and complements and is consistent with not only the Coconino County Comprehensive Plan, but also the Flagstaff Area Open Spaces and Greenways Plan, the Flagstaff Regional Plan, and the State of Arizona’s “Growing Smarter” legislation.

The Coconino County Zoning & Subdivision Ordinances contain provisions that decisions made by the Board of Supervisors and by the Planning and Zoning Commission must be consistent with the Comprehensive Plan and the local area plan. Requests for projects that are inconsistent with either plan must be accompanied by a request to amend the plan(s) or be denied. This area plan also lists action items to assist the Board of Supervisors in setting program priorities for the various departments within the County (Appendix B). Most of the action items, if pursued by the Board of Supervisors, will require further public participation to ensure they adequately reflect community concerns. The Planning Committee has agreed to reconvene as needed in the future.

### GUIDING PRINCIPLES

The Coconino County Comprehensive Plan has a conservation framework. It details a series of ecological principles and provides specific guidelines for making decisions on development projects. In the process of producing this planning document for the Fort Valley Highway 180 Scenic Corridor, it became clear that residents and property owners of the planning area believe that sustainability should be an overarching theme guiding decisions on development. The concept of sustainability is often tied to Aldo Leopold’s land ethic, which is discussed in the County Comprehensive Plan. Leopold expressed the land ethic in his book “A Sand County Almanac”, which many consider most important environmental book ever published. Leopold wrote:

*The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.*

and:

*A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community [or ecosystem]. It is wrong when it tends otherwise.*

Individuals, as well as governmental entities, have responsibility for the sustainability of the ecological, social, and economic environments of the planning area. New development adds demands for resources, especially land, energy, and water, and these new demands need to be reduced if not counterbalanced by efficient use of resources to maintain environmental integrity while simultaneously improving the quality of life for residents. The following guiding principles help support the community’s desired goals:

### ECOLOGICAL

- Maintain ecological processes and patterns, including interactions, connectivity, and diversity.
- Recognize and consider the long-term impacts of development on the environment, including consumption of resources.

### SOCIAL

- Protect important historical, cultural, aesthetic, and recreational resources.
- Enhance community services, public health, safety, and welfare for residents.
- Engage residents to actively participate in achieving the community vision.

### ECONOMIC

- Facilitate development that uses land and other environmental resources efficiently.
- Promote sustainable economic opportunities for individuals and the community.
- Enhance conditions for tourism and recreation.





# VISION STATEMENT

From the perspective of future  
residents of the Fort Valley  
Highway 180 Scenic Corridor

## NATURAL RESOURCES & ENVIRONMENTAL QUALITY

Residents of the planning area continue to highly value the natural environment. They work with the U.S. Forest Service and private land owners to promote forest health, reduce fire hazards, and increase recreational opportunities. Wildlife corridors identified with state and federal agencies remain unobstructed, and the planning area continues to support healthy animal populations. Environmentally sensitive lands are a top priority for acquisition of open space. Residents eradicate or reduce invasive plant species and promote the use of native plants. Water quality is improved through casing of older wells and the replacement of older, grandfathered septic systems. Air quality has remained excellent due to the use of low-polluting home-heating units and dust-free surfaces on roads.



## TRANSPORTATION

The Highway 180 corridor is improved to mitigate traffic issues and to provide multimodal opportunities. Bicycle/Pedestrian paths are along Highway 180 from the Flagstaff city limits to Snow Bowl Road and plans to continue the path have been developed. Pedestrian crossings at several locations along Highway 180 enhance the safety of residents and visitors. Many neighborhood roads have been enhanced with paving or dust mitigation as the result of improvement districts.



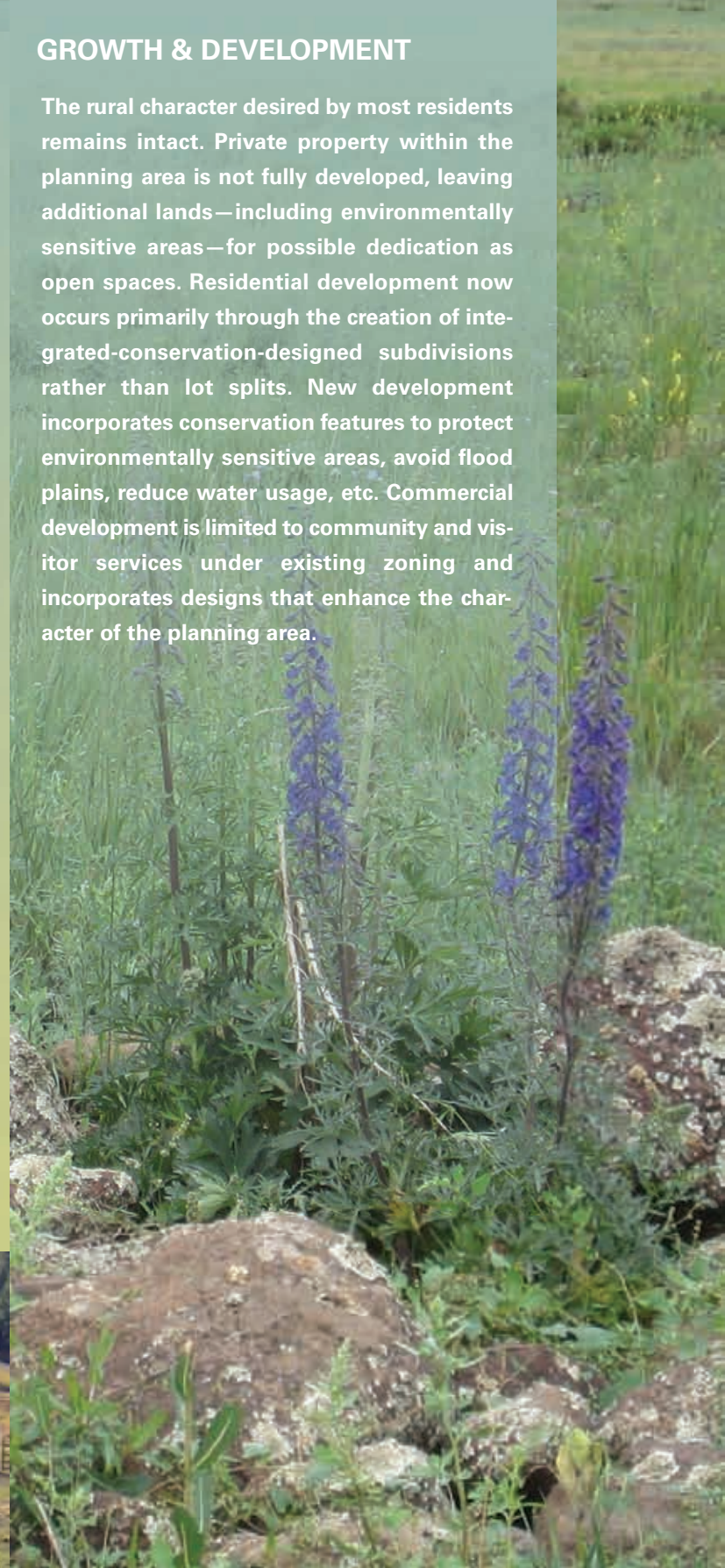


## COMMUNITY CHARACTER

Quality of life within the community remains high, especially with the protection of scenic vistas, dark night skies, and natural quiet. Residents embrace sustainability principles at the individual and community levels. Water conservation strategies are used throughout the planning area. Commercial uses are clustered and have incorporated additional design-appropriate features for integration into the community. The planning area is a hub of low-impact recreation, with opportunities for residents and visitors. Property owners are committed to the preservation of historical features of the area and embrace community partnerships to achieve this. The Highway 180 corridor is protected and promoted as a scenic gateway into the City of Flagstaff and includes a historical and cultural district near the city limits that is enjoyed by visitors and residents alike.

## GROWTH & DEVELOPMENT

The rural character desired by most residents remains intact. Private property within the planning area is not fully developed, leaving additional lands—including environmentally sensitive areas—for possible dedication as open spaces. Residential development now occurs primarily through the creation of integrated-conservation-designed subdivisions rather than lot splits. New development incorporates conservation features to protect environmentally sensitive areas, avoid flood plains, reduce water usage, etc. Commercial development is limited to community and visitor services under existing zoning and incorporates designs that enhance the character of the planning area.





"I enjoy the tranquility and the endless show of colors produced by Nature: warm smells and reawakening hues as spring emerges; green grass and dark green forest set against the vivid blue Arizona summer sky; muted pastels of wildflower blossoms that linger well into fall; and freshly fallen snow draped on limbs like powdered sugar all the way up the mountain in winter."

–Susan Deaver Olberding,  
*Fort Valley Then and Now* (Fort Valley Publishing, 2002)





## NATURAL ENVIRONMENT

### INTRODUCTION

The natural environment has many characteristics that can and should influence development, including **floodplains**, soils, high groundwater, perched **aquifers**, **wildlife corridors**, and forest conditions related to wildfire. Residents of the Fort Valley Highway 180 Scenic Corridor highly value the natural environment. This is illustrated by the results of the Planning Committee's survey of property owners. In fact, natural environment preservation had the second-highest average rating, slightly behind noise/natural quiet, a component of the natural environment. Many residents chose to live in the area because of the natural environment...its sweeping views of the San Francisco Peaks and surrounding forests, magnificent night sky, access to recreation, and large areas of open space.

### VISION

We envision a community where residents work together to protect the natural environment, including enhancing it where past actions have detrimentally impacted it.

### CLIMATE

The climate within the planning area is semi-arid with cool temperatures. The monthly average maximum and minimum temperatures in Fort Valley are lowest in January (41.5° and 10.0° F) and highest in July (80.4° and 44.8° F). Annual precipitation averages 22.12

### ***floodplain***

The land area adjoining a river, stream, lake, or other body of water that is susceptible to inundation by a 100-year flood.

### ***aquifer***

An underground geologic formation that contains sufficient saturated, permeable material to yield significant quantities of groundwater to wells and springs.

### ***wildlife corridor***

An often limited or constrained area providing connectivity to larger animal habitats.





## SURVEY RESULTS

Environment and open space topics were the only subjects to be considered “very important” by more than 80% of respondents.

inches, with May and June being the driest months and the monsoon months of July and August being the wettest. Snowfall averages 83.1 inches. (Data are based on records from 1909 to 2005.)

## LANDFORMS

The planning area is within the San Francisco Volcanic Field, a 1,800 square mile area of the southern Colorado Plateau. The elevational range within the planning area is 6700 to 8000 feet, but the range visually extends to the 12,633 foot summit of Humphrey’s Peak, the tallest of the San Francisco Peaks and the highest elevation in Arizona. It and other topographic features that dominate the planning area have volcanic origins.

The San Francisco Peaks outline San Francisco Mountain, the only stratovolcano in the Flagstaff region. It formed by a series of eruptions and mudflows that gradually built to an estimated maximum height of 16,000 feet, which it reached approximately 400,000 years ago. Its eruption resulted in the San Francisco Peaks of today.

South Fort Valley sits on a 6-million-year-old lava flow from San Francisco Mountain. The eastern portion of South Fort Valley is on the lower slopes of Elden Mountain, a 500,000-year-old lava dome. To the southwest and about 300 feet above Highway 180 is Observatory Mesa, a 300,000-year-old lava flow that originated from A-1 Mountain, which here is visible to the west. Highway 180 passes through a small valley and to the west enters a narrows cut by the Rio de Flag (and past highway construction) through a lava flow from San Francisco Mountain. The highway then ascends and traverses this lava flow to the Fort Valley portion of the planning area.

Fort Valley is a broad, flat valley surrounded by volcanoes and lava flows. Volcanoes include the San Francisco Peaks that formed San Francisco Mountain to the northeast and two prominent cinder cones: Wing Mountain to the west and A-1 Mountain to the south. Lava flows formed the rest of the surrounding uplands (about 100-400 feet above the highway), including the A-1 flow to the south, the 1.3 million-year-old Wing Mountain flow to the west, and flows from San Francisco Mountain to the north. Water drains from the uplands into the valley, but drainages are usually dry. The Rio de Flag comes from the southwestern slopes of the San Francisco Peaks into Fort Valley. There it combines with water from smaller drainages, passes along the Highway 180 corridor to South Fort Valley where it is joined by Schultz Creek, and continues south to the City of Flagstaff. Therefore, the Rio de Flag drains most of the planning area from Fort Valley southward.

North of Fort Valley, Highway 180 crosses several lava flows from San Francisco Mountain before entering Kendrick Park, which is another broad, flat valley surrounded by landforms of volcanic origin. These include the White Horse Hills and the San Francisco Peaks to the southeast, the Hochderffer Hills (lava domes and cinder cones) to the south, the 10,418 foot Kendrick Peak (consisting of a series of lava domes and flows) to the west, Horseshoe Hill to the northwest, and Saddle Mountain to the northeast.

### AIR QUALITY

The planning area generally has good air quality, as it is located outside areas known for major problems. Therefore, air quality in the planning area is not heavily regulated by the Arizona Department of Environmental Quality. Nevertheless, there are air quality issues of concern to the community. These include high levels of ozone and particulate matter. Major ozone sources likely include the Phoenix area and California, but particulates have local sources, primarily wood-burning stoves and fireplaces within the planning area and wildfires and *prescribed burns* on surrounding U.S. Forest Service land. Also, unimproved road surfaces create significant dust. The valleys of the planning area are most susceptible to air quality issues, including haze that can reduce visibility. Haze forms most frequently in the cold months when there is greater use of wood stoves and fireplaces and cold-air drainage off the surrounding higher elevations produces air inversions that trap pollutants. The South Fort Valley area, due to its proximity to the City of Flagstaff, may have additional air quality issues.

Although wood stove manufacturers have had to upgrade their units to meet stricter Environmental Protection Agency (EPA) standards, the County still allows older, pre-EPA standard stoves and fireplaces to be installed in homes, and there are no programs for either retrofitting or replacing existing units to improve air quality. In addition, there are no County standards for mitigating dust from unpaved roads. Therefore, improving or maintaining air quality has been left to individuals and road improvement associations. However, given the concern for air quality expressed by property owners in the survey, policies aimed at improving conditions are warranted.

### GOAL: IMPROVE AIR QUALITY.

Policies recommended for the planning area:

1. Evaluate proposed development projects for impacts on air quality and, if approved, require (a) mitigation measures to reduce dust during construction and (b) dust-free travel surfaces within the development area in the conditions of approval.
2. Amend existing building codes to allow only EPA-approved wood stoves and fireplaces.
3. Encourage residents to replace existing wood stoves and fireplaces with EPA-approved units.
4. Encourage dust mitigation measures for both public and private unpaved roads.

### SURVEY RESULTS

Air quality is an important issue to residents of the planning area, as **80%** of the respondents to the Planning Committee's survey rated it a very important topic.

### *prescribed burn*

The controlled application of fire to wildland fuels in either their natural or modified state, under specific environmental conditions. Prescribed burns are confined to a predetermined area to meet resource management objectives.





## SURVEY RESULTS

Residents of the planning area greatly value dark night skies, as **75%** of the respondents to the Planning Committee's survey considered it a very important topic.

## SURVEY RESULTS

Property owners in the planning area regard the soundscape as the most important topic listed in the Planning Committee's survey, with **88%** of the respondents considering natural quiet very important.

### *off-highway vehicle (OHV)*

A motorized vehicle used for travel in areas that are normally inaccessible to conventional highway vehicles. OHVs include dirt motorcycles, dune buggies, jeeps, four-wheel-drive vehicles, snowmobiles, and all-terrain vehicles.

## DARK SKIES

The region is noted for astronomy, and the planning area is less than two miles from Lowell Observatory and four miles from the Naval Observatory. In order to protect dark skies, the County developed a lighting ordinance to regulate light sources and amount of light generated by development projects. The County identifies the planning area as Lighting Zone II, which has more stringent requirements for lighting than outlying areas. In the majority of cases, the lighting ordinance is more strictly applied to commercially related projects through the requirement of a lighting permit. Residences are held to similar standards, but are less likely to be required to have a formal review. Residents can obtain information about proper lighting from the County Planning and Zoning Department, the Flagstaff Dark Skies Coalition, and local observatories. Reduced lighting is sometimes considered a safety hazard by those unfamiliar with the area's dark skies, but correcting this impression is usually a matter of education.

### GOAL: PRESERVE DARK NIGHT SKIES.

Policies recommended for the planning area:

1. Pursue stricter standards for residential lighting in Lighting Zone II, including but not limited to (a) requiring fully shielded fixtures except for intermittent motion detectors and (b) reducing the overall number of lumens permitted per residence.
2. Evaluate proposed development projects for impacts on dark night skies and, if approved, require mitigation measures in the conditions of approval.
3. Encourage property owners to install minimal levels of outdoor lighting and replace unshielded lighting with fully shielded fixtures.
4. Add signage in selected areas to encourage residents to preserve dark night skies.

## SOUNDSCAPE

Soundscape is the array of sounds in an environment. It consists of natural sounds, including from weather and wildlife, and human-related sounds, including from vehicles, pets, and construction. Human-related sounds, especially when they dominate natural sounds, may be considered noise pollution. The planning area encompasses several open valleys that are vulnerable to noise from roads, *off-highway vehicles (OHV's)*, dogs, construction, neighbors, aircraft, and trains. The survey indicated that residents were especially concerned about OHV's and barking dogs. The County does not have a noise ordinance with time guidelines and loudness standards, but has a Barking Dog Ordinance with provisions enforced by the Animal Management Division of the Health Department.

### GOAL: REDUCE THE EFFECTS OF NOISE POLLUTION TO HELP PRESERVE THE NATURAL SOUNDSCAPE.

Policies recommended for the planning area:

1. Pursue the enactment of a noise ordinance.
2. Evaluate proposed development projects for noise impacts and, if approved, require mitigation measures in the conditions of approval.
3. Review and as necessary add or relocate signage to prohibit engine-braking.
4. Encourage Arizona Department of Transportation (ADOT) to use rubberized asphalt on Highway 180 and I-40 to reduce road noise.
5. Encourage residents to contact the Coconino County Sheriff's Office to report noisy vehicles.

## SOILS

The planning area includes widely different soils depending on local site conditions. Sites at the edges of lava flows have soils that range from very shallow and rocky to deep and



cobbly or stony and are relatively well drained. Soils on gently to strongly sloping alluvial fans are deep, moderately fine-textured, cindery, and very well drained. In contrast, soils in the valleys are fine textured and poorly drained. Soil-related problems include erosion, drainage in septic tank filter fields, and high shrink and swell of fine-textured clay soils affecting building foundations. Due to concerns about future development, a soil survey of the planning area was completed in 1969 and revised in 1973 by the U.S. Department of Agriculture, Soil Conservation Service in cooperation with the Coconino County Planning and Zoning Department and the Coconino Natural Resource Conservation District.

### GOAL: PROTECT SOIL RESOURCES.

Policies recommended for the planning area:

1. Evaluate proposed development projects for impacts on soils—including erosion, drainage, and sedimentation—and, if approved, require mitigation measures in the conditions of approval.
2. Give preference to proposed developments that involve very low density, integrated conservation design (see *Growth and Development*, pg. 65), and a centralized sewage treatment facility, especially for areas with shallow or poor soils.
3. Require environmentally sensitive waste-water systems in areas with shallow or poor soils.

### VEGETATION

Another visually striking aspect of the planning area is the vegetation, which includes ponderosa pine forest, quaking aspen forest, and meadow grassland (parks), as well as scenic views of high-elevation forests and alpine tundra on the San Francisco Peaks. Scientific research on vegetation has a long history in the planning area.

Ponderosa pine forest is the most extensive vegetation within the planning area. Before settlement by non-natives, low-severity surface fires burned approximately every 5-10 years. High-severity crown fires were rare and limited to small patches. The frequent surface fires



Left: Museum of Northern Arizona  
Above: Leroux Forest Nursery.  
Photo courtesy of Fort Valley  
Experimental Forest





killed thin-barked small ponderosa pines and thereby maintained open forest characterized by large canopy trees, scattered clumps of smaller trees, and a dense herbaceous layer. Surface fires ended with the beginning of livestock grazing in the late 19th century, because the cattle and sheep consumed the herbs that formerly carried the surface fires. The U.S. Forest Service began active fire suppression in the early 20th century.

Most of the ponderosa pine forest was logged in the 19th and 20th centuries (some old-growth still exists, including areas in the Fort Valley Experimental Forest adjacent to Fort Valley that are visible from Highway 180). Tree regeneration followed the logging and, coupled with the absence of thinning by frequent surface fires, resulted in overly dense ponderosa pine forest. High densities of trees have had several negative effects, including more extensive crown fires and greater tree mortality (increased competition among trees increases water stress, which makes trees more susceptible to bark beetles and ultimately to mortality, especially during drought). Beginning in the late 20th century, forest densities on some public and private lands have been reduced by manual and mechanical tree thinning and prescribed burning. In thinning, trees too small for lumber are cut, stacked in piles, and burned after drying. Smoke from pile burning and prescribed fires can adversely impact air quality of the planning area.

Meadow grassland is the second most abundant native vegetation in the planning area. It occurs where finely textured soils do not support the growth of trees (such as in Fort Valley and Kendrick Park) and where crown fires have killed forest trees (such as in patches on the flanks of the San Francisco Peaks and along Highway 180 north of the planning area). Native meadow grassland has been disturbed by past agricultural use and past and present development.

Quaking aspen forest occurs in relatively small patches in the planning area, primarily on sites that are moist (scattered aspen trees also occur in moist ponderosa pine forest). Larger

patches are visible on the San Francisco Peaks. Aspen trees add spectacular color to the landscape in the fall, attracting tourism to the region, but recently have suffered from increased mortality caused by insects, bark beetles, and fungi. In addition, aspen regeneration has been reduced by the lack of fires (burning stimulates root sprouting, which is aspen's primary means of reproduction) and elk browsing of sprouts.

Concerns about vegetation in and around the planning area have focused primarily on alleviating the fire risk posed by overly dense ponderosa pine forest. In 1996, the Greater Flagstaff Forest Partnership (GFFP) was created through a collaboration of Grand Canyon Trust, Northern Arizona University, City of Flagstaff, and Coconino County. Fort Valley was the first project area for GFFP. The goal was to study the effects of reducing forest densities by thinning. Thinning can generate controversy, especially when trees with a diameter greater than 16 inches are included (environmental groups want to protect large trees, while cutting such commercially valuable trees can offset the costs of thinning). Challenges to treating the forests include cost, lack of economic uses for small diameter trees, effects on wildlife (especially the Abert's squirrel), introduction of non-native plants, avoidance of litigation, and smoke effects on air quality (see *Natural Environment, Air Quality*). GFFP is working with the Southwest Forest Alliance to evaluate different thinning treatments within the Fort Valley demonstration project.

The Community Wildfire Protection Plan (CWPP) for Flagstaff and nearby communities was completed in January 2005 by GFFP and the Ponderosa Fire Advisory Council. The goal of this plan is to protect communities from crown fire. The development of the CWPP was authorized by the Healthy Forests Restoration Act of 2003, and the CWPP serves as a strategic plan as well as an action plan. It provides a broad operating framework for all agencies and land owners within the region—private, city, county, state, and federal – while identifying protection priorities. Crown fires in the planning area have the potential for catastrophic impacts, including threats to public health and safety, loss of homes and other structures, damaged infrastructure, loss of cultural resources, changes in wildlife *habitat*, loss of recreation opportunities, and altered scenic vistas.

Another vegetation-related issue of importance to many residents of the planning area is maintaining native vegetation by utilizing indigenous plants for landscaping projects and avoiding/controlling *invasive plant species*, especially those that are *noxious weeds*. Over half of the respondents to the Planning Committee's survey considered invasive plant species a very important topic. Invasive plants can replace native plant species, provide lower quality forage for grazing, and even change wildfire patterns.

#### **GOAL: PROTECT AND RESTORE NATIVE VEGETATION.**

Policies recommended for the planning area:

1. Encourage residents and property owners to be involved in the public participation phases of forest planning by land management agencies.
2. Encourage land owners and land management agencies to reduce wildfire risks on lands they own or manage.
3. Evaluate proposed development projects for maintaining existing native vegetation and preventing the introduction and spread of invasive plants. If approved, require mitigation measures such as use of certified weed-free fill in the conditions of approval.
4. Encourage residents, property owners, and land-management and road-management agencies to protect native vegetation by controlling the establishment and spread of invasive plants using ecologically friendly means (see *Road Maintenance*, pg. 43).

#### *habitat*

The physical and biological environment where an organism lives. Often characterized by a dominant plant form or physical characteristic, habitat includes such components as cover, food shelter, water, and breeding sites.

#### *invasive, non-native species*

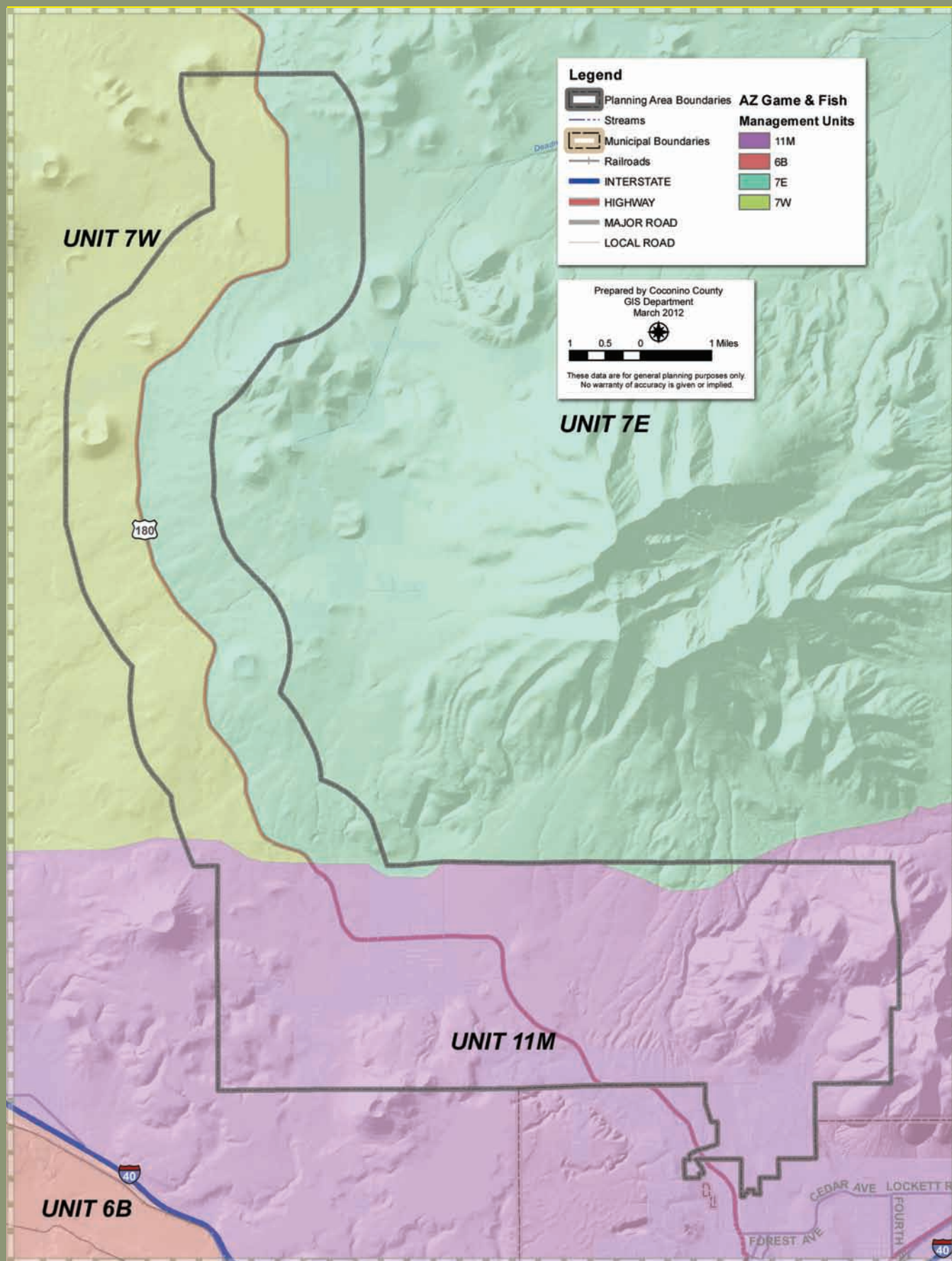
A plant species not historically found in the local area. When introduced into an area, these species proliferate, replacing native species and reducing biodiversity.

#### *noxious weed*

Any parasitic or foreign plant that can injure crops, other useful plants, agriculture, livestock, fish, or wildlife resources, or public health; any plant on the Federal Noxious Weed List or the Arizona Noxious Weed List.



# GAME MANAGEMENT





## WILDLIFE

Wildlife species in the planning area include elk, mule deer, mountain lion, bobcat, black bear, fox, coyote, raccoon, skunk, Abert's squirrel, Gunnison's prairie dog, bats, and many birds. Wildlife-based recreation has been dominated by hunting, but wildlife viewing has increased in popularity. The planning area has numerous potential areas for both hunting and viewing. The planning area lies within Game Management Units 7 and 11 M and partially within the boundaries of the A-1 Quiet Area (see map), which was designated by the U.S. Forest Service to provide an area of reduced motorized activity to maintain populations of wildlife species sensitive to human disturbance.

Wildlife considerations for the planning area include conserving wildland blocks and corridors connecting them. Wildland blocks are defined by the Arizona Game and Fish Department as large contiguous pieces of relatively undisturbed land dominated by natural vegetation that is habitat for a diverse array of native species. Wildland blocks may include public as well as private lands. Large wildland blocks adjacent to the planning area include the San Francisco Peaks, Observatory Mesa, and Woody Ridge/Dry Lake. It is essential to maintain connectivity between these blocks through protection of wildlife corridors, i.e., pathways with few or no barriers to the movement of wildlife species between one or more wildland blocks. Wildlife barriers in the planning area include Highway 180, development, and fences. There are three major wildlife corridors within the planning area (see map), as well as smaller corridors. Wildlife also can be protected by preserving native vegetation, adapting current fences to allow wildlife movement, encouraging wildlife-based recreation, maintaining dark skies, controlling non-native plants and animals, containing pets, and using integrated conservation designs for new developments to maximize *open space* with native vegetation.

## GOAL: PROTECT WILDLIFE AND HABITAT.

Policies recommended for the planning area:

1. Work with the Arizona Game and Fish Department, land management agencies, and other local authorities to identify the specific areas needed to maintain connectivity between wildlife habitats (wildland blocks).
2. Evaluate proposed development projects for impacts on wildlife and, if approved, require mitigation measures in the conditions of approval.
3. Favor development projects that protect open space, wildlife corridors, and wildlife habitat.



## *open space*

A primarily undeveloped landscape that provides scenic, ecological, or recreational values or that is set aside for resource protection or conservation; an area of managed production such as forestland, rangeland, or agricultural land that is essentially free of visible obstructions.



***environmentally sensitive lands***

Areas characterized by floodplains, springs, stream corridors, wetlands, threatened and endangered species habitat, old growth or rare vegetation, steep slopes, or other critical natural resources as determined by best available science.

***riparian area***

An area bordering a river or stream that supports an ecosystem of wildlife, vegetation, soils, and water.

***100-year flood***

A flood that has a one percent chance of being equaled or exceeded in any given year.

**ENVIRONMENTALLY SENSITIVE LANDS**

***Environmentally sensitive lands*** are areas that require special consideration for development and protection. These include floodplains, ***riparian areas***, wetlands, springs and seeps, and steep slopes—all of which occur within the planning area. The floodplains of the Rio de Flag and other drainages have been a significant constraint for development in Fort Valley. South Fort Valley has a much smaller area affected by the Rio de Flag, but Schultz Creek traverses the Elden Lookout Road area and crosses Highway 180 between Creekside and Quintana Drives. There also are several springs within Fort Valley, all of which played important roles in the early exploration and history of the area. Taylor and Chimney Springs have gone dry, and Big and Little Leroux Springs have been capped. South Fort Valley has Coyote Spring, but it has been damaged by right-of-way improvements along Highway 180. Floodplain, spring, and seep areas are seasonally wet. Developments that occurred in the past when the areas were dry have been followed by problems during winter storms, spring snow melt, and summer monsoonal rains.

The planning area falls within the Coconino County Flood Control District, which manages flood-related issues. The ***100-year floodplain***, which is the area that has a 1% chance of flooding in any given year, occupies substantial area in Fort Valley. Flooding is a natural process with ecological functions, but can damage structures, wells, and waste water treatment systems. Moreover, development can alter the frequency and intensity of flooding. The County has had a floodplain ordinance to regulate development in designated floodplains since 1981; however, some residents are concerned that floodplains are actually larger than shown by the existing floodplain delineation. As of 2010, funding has been allocated from the Coconino County Flood Control District budget to restudy areas within the County, including Fort Valley.

Constraints of steep topography are not as common within the planning area as in other areas of Coconino County. South Fort Valley has steep slopes on some private lands, and protection of these is probably best addressed by adoption of an environmentally sensitive lands ordinance. Slopes are often desired for residential construction because they can offer spectacular views; however, impacts can be great because steep slopes often have unstable, highly erodible soils.

**GOAL: PROTECT AND ENHANCE THE NATURAL QUALITIES OF ENVIRONMENTALLY SENSITIVE LANDS.**

Policies recommended for the planning area:

1. Encourage preservation and restoration of environmentally sensitive lands.
2. Consider the adoption of an environmentally sensitive lands ordinance to ensure protection of these unique areas (see *Other Natural Hazards*, pg. 25).
3. Evaluate proposed development projects for impacts on environmentally sensitive lands and, if approved, require mitigation measures that maximize conservation of distinctive natural features in the conditions of approval.
4. Favor developments that avoid construction on floodplains and do not alter the natural processes and ecological function of flooding.
5. Promote the use of conservation easements, land acquisition, or cluster development to protect environmentally sensitive lands.
6. Encourage use of floodplains for open space.



## WATER AND WASTEWATER

### INTRODUCTION

Water is a critical resource that needs to be managed for the betterment of the community. Water resources are a major concern of residents and property owners in the Fort Valley Highway 180 Scenic Corridor, as illustrated by the results of the Planning Committee's survey. Water is a factor that affects how much and how fast an area develops. Therefore, development in the planning area must be in balance with existing water resources. Development also must provide for adequate wastewater disposal, and impacts on watersheds must be limited. Wastewater disposal was rated as very important by 63% of survey respondents.

The planning area is unique within Coconino County in that many lots have a well on the property. Development within the planning area has occurred over a long time period; therefore, these wells (and wastewater treatment systems) differ greatly in construction. A few locations have communal wells shared by a small number of households, and currently there are two deep wells and one Domestic Water Improvement District (DWID) in Fort Valley. Other residents rely on water hauled from outside the planning area. Regardless of the source of water, conservation techniques enhance the viability of water supplies.

Water planning efforts within Coconino County include participation in statewide water resource planning endeavors and the Coconino Plateau Water Advisory Council (CPWAC), a regional partnership formed to address water resource issues.

### SURVEY RESULTS

All three water issues were rated as "very important" by over two-thirds of respondents: water quality (**79%**), supply (**75%**), and conservation (**69%**).



## VISION

We envision that high-quality water is available for residents and that development uses and disposes of water efficiently while having little long-term impact on water resources.

## REGULATORY FRAMEWORK

The Arizona Department of Water Resources (ADWR) has authority over water resources within the state. ADWR manages two programs intended to ensure that water needs of new *subdivisions* are addressed: Assured Water Supply and Water Adequacy. The Assured Water Supply program is administered within designated Active Management Areas (AMAs; there are none in Coconino County) and requires all subdivisions to prove that they have a 100-year water supply.

The Water Adequacy program, which applies to the rest of the state including all of Coconino County, requires all new subdivisions be designated by ADWR as having either adequate (100-year) or inadequate water supply (determination of an inadequate supply does not preclude the approval of the subdivision). There are five criteria to prove that a subdivision has a 100-year water supply: water quality, financial capability, and continuous, physical, and legal availability. Determination of physical availability is based on water above a depth of 1200 feet. Because deep wells in the County (including in the planning area) are in either the Coconino or Redwall aquifers, both of which are well below a depth of 1200 feet, most subdivisions are deemed as having an inadequate supply. The County Subdivision Ordinance requires subdivisions with an average lot size of less than 5 acres to have a water system unless the developer can demonstrate that each lot can accommodate a well. Several subdivisions within the planning area have been approved based on this provision; however, they are in areas with shallow, perched aquifers. Although 2007 state legislation authorized all cities and counties outside of AMAs to require water adequacy for all subdivisions, this does not apply to *lot splits*, an important distinction because these account for at least 70% of the lots within the planning area. It also does not apply to commercial development.

## WATER SOURCES, QUANTITY, AND CONSERVATION

A complete hydrological study and analysis of the groundwater basin of the planning area has not been done; however, two graduate student thesis projects on hydrological resources in Fort Valley have been completed. According to the ADWR permit records as of March 2010, there were 433 wells in the planning area, including 80 monitoring wells; however, wells predating 1975 may not be included in the records. Most wells are for individual households and access water from perched aquifers at 100-250 feet with yields of 0.1-50 gallons per minute. Perched aquifer supplies can be small and fluctuate greatly based on precipitation. While unsuitable as long-term water supplies, they can meet the demands of individual households. Assuming average water use of 100 gallons per day per person (a generous amount that does not reflect conservation efforts), a four-person household needs well production to average only 0.3 gallons per minute. Recharge of these perched aquifers is by infiltration of precipitation, but it is highly variable from year to year and these wells can fail during extended periods of low precipitation.

Below the perched aquifers are the Moenkopi Formation and the Redwall Limestone. The Moenkopi Formation is at a depth of approximately 175 feet in Fort Valley but much closer to the surface in other portions of the planning area. It provides limited groundwater because it does not readily transmit water. There are approximately a dozen wells in the planning area that utilize this source. The Redwall Limestone provides a regional aquifer

### *subdivision*

The division of land into six or more lots, parcels, or fractional interests under 36 acres, for sale or lease, including lands divided as part of a common promotional plan; also, the resulting site of subdivided lands.

### *lot split*

A division of land into five or fewer parcels.

located at a depth of approximately 2,000 feet. Accessing this water is economical only if multiple property owners combine to dig deep wells. Both deep wells mentioned in the introduction to this section access this aquifer. One was drilled in association with the Ranch at the Peaks Subdivision and one in association with the Fort Valley Pines subdivision. Neither well has gone through ADWR's water adequacy process.

Residents of the planning area who either lack a productive well or have inadequate supplies during dry seasons haul water or purchase it from commercial haulers. The City of Flagstaff provides standpipes for bulk water sales; however, this municipal supply can be affected by drought and its availability is subject to possible changes in city policy. Other possibilities for obtaining water include shared wells, private water systems, water districts, and owner cooperatives. These can be converted to public water systems (defined by state law as providing potable water to 15 or more service connections or regularly serving at least 25 persons for at least 60 days of the year).

The only Domestic Water Improvement District currently within the planning area serves the two units of the Majestic View Subdivision located on both sides of Highway 180 in Fort Valley. The deep well that is associated with the Fort Valley Pines Subdivision in southwestern Fort Valley could be incorporated into a water district to serve additional users. A water district has the authority to establish a property tax, hook-up fees, and water-use fees and can bond for improvement projects. These districts are not subject to the requirements of the Arizona Corporation Commission, which approves rates and regulations for public water companies. At this time, water districts are not required to demonstrate a 100-year adequate supply.

Water needs, however, can be addressed by means other than wells or hauling water. For example, rain water and snow melt can be harvested (collected) by retrofitting buildings with a storage tank and treatment system. Water conservation is another approach and includes reducing length of showers, using low-flow plumbing fixtures and appliances, using instant or cycling hot water systems, and promptly repairing water leaks (residents with wells can detect leaks by installing water meters). In addition, exterior water use can be reduced by incorporating drought-tolerant native species in landscaping, watering with domestic (gray) water or rainwater, and installing drip irrigation systems.

### **GOAL: CONSERVE AND PROTECT EXISTING WATER RESOURCES.**

Policies recommended for the planning area:

1. Encourage the Arizona Department of Water Resources to conduct a comprehensive hydrological study of the planning area to determine sources, quantity, and quality of groundwater.
2. Consider seasonal variables in planning for water resources.
3. Examine the possibility of creating a public water system where appropriate.
4. Assist residents in the formation of Domestic Water Improvement Districts.



Majestic View Domestic Water Improvement District facilities.



5. Require water conservation be incorporated in all new developments.
6. Encourage residents to practice water harvesting and conservation.
7. Adopt a water conservation ordinance that includes standards for plumbing fixtures, appliances, and landscape irrigation.
8. Require all new developments be landscaped with drought-tolerant native plant species.
9. Encourage users of wells to install meters to track water use and identify when leaks occur.



Rainwater harvesting at the historic Rountree Farm.

## WATER QUALITY AND WASTEWATER DISPOSAL

The Water Division of the Arizona Department of Environmental Quality (ADEQ) is responsible for regulating water quality. Water from domestic wells that service fewer than 15 connections or 25 people are not subject to EPA drinking water regulations and testing for potability is not required. Water quality information for domestic wells is not recorded or made available through any public agency.

ADEQ has delegated the authority for review and approval of wastewater systems to the Coconino County Health Department. Prior to 2001 the County reviewed wastewater systems using a set of general guidelines. In 2001 official rules were adopted that apply to all wastewater systems. Various systems have been used in the planning area, including standard septic-tanks with leach-fields, as well as mounds, combinations, and package systems.

There are three categories of water contamination: natural-origin, natural-origin but concentrated by human activities, and human-origin. Domestic well owners should regularly monitor their well-water quality and follow results over time as some background bacteria may be present from past livestock grazing. Home water treatment systems are also recommended to attain national drinking water standards. In the early 1990's, residents of Fort Valley became concerned about local groundwater quality after private testing detected fecal coliform bacteria in some domestic water systems. The suspected cause was seasonally high groundwater levels intersecting leach fields of septic systems. ADEQ conducted groundwater sampling to assess the impacts of septic systems on groundwater quality during various groundwater conditions and reached three conclusions: standard septic systems should no longer be approved for Fort Valley, there was no immediate need to replace existing standard systems, and older wells needed to be upgraded and properly protected.

All well systems are vulnerable to mechanical failure that can contribute to water contamination, and old wells within the planning area need to be retrofitted to provide additional protection against contamination from surface runoff. Today there are stringent requirements for new wells to have well casings and caps. A modern well has two well casings, including an outer tubular structure that encircles the actual casing and provides a surface seal to prevent surface contaminants from entering the well. The top of the surface casing has a wellhead seal or cap that prevents debris, insects, or small animals from getting into the well system. Wells lacking these protections are at high risk, especially when inundated by high ground water. Residents with livestock and other animals are required to ensure adequate disposal of animal waste to reduce the occurrence of contamination.

**GOAL: PROTECT AND IMPROVE WATER QUALITY.**

Policies recommended for the planning area:

1. Encourage the Arizona Department of Environmental Quality, the Coconino County Health Department, and private landowners to sample wells at regular intervals to determine if water quality is within current standards, especially for nitrate and coliform levels that indicate cross contamination.
2. Evaluate proposed development projects for impacts on water quality and, if approved, require mitigation measures in the conditions of approval.
3. Require all developments to have adequate wastewater systems.
4. Encourage all developments approved with individual wastewater treatment plants to reuse treated wastewater for irrigation and/or fire protection.
5. Consider the possibility of creating a public wastewater treatment system where appropriate.
6. Encourage residents to (a) upgrade older wells with proper surface seals and (b) abandon any unused wells, including sealing to prevent contamination of ground water.
7. Encourage residents to upgrade existing standard septic systems to protect water resources.
8. Enforce Zoning and Health Department regulations pertaining to the keeping of horses and other animals.

**STORM-WATER MANAGEMENT**

Storm-water runoff is a major source of water pollution due to the discharge of contaminants into washes, streams, and wetlands. Storm-water flows can transport litter, debris, dirt, chemicals (including road salts), and other pollutants that are eventually deposited. By practicing healthy household habits, residents can keep common pollutants like pesticides, animal waste, grass clippings, and automotive fluids off the ground and out of storm water



Ranch at the Peaks drainage structure.



and help protect streams, wetlands, and other surface waters. The County has enlisted community volunteers to monitor the condition of local washes to help protect waterways in and near the planning area. Volunteer efforts help provide quality data and build stewardship of our local waters. Protection of surface waters is very important in the planning area because large areas are affected by surface waters, many households use well water, and many wildlife species depend on surface waters.

#### **GOAL: REDUCE CONTAMINANTS FROM STORM-WATER RUNOFF.**

Policies recommended for the planning area:

1. Encourage Coconino County to work with the Federal Emergency Management Agency (FEMA) to review and revise floodplain/floodway mapping of the planning area to fully cover the effects of storm-water runoff and improve groundwater recharge from this runoff.
2. Encourage residents to adopt practices to prevent the discharge of household-related substances from residential properties, including proper disposal or recycling of products such as paint, motor-oil, and other hazardous materials.
3. Encourage rainwater harvesting and on-site detention of storm-water to minimize flow volumes and reduce the amount of contaminants transported into waterways.
4. Require Coconino County Public Works Department develop and use best-management practices with respect to road maintenance and snow removal to minimize the discharge of contaminants.
5. Develop a community volunteer program to promote local stewardship of natural waterways.





## PUBLIC SAFETY

### INTRODUCTION

Prevention and protection from natural and human-caused events that endanger personal safety is obviously a concern of residents of the Fort Valley Highway 180 Scenic Corridor. Core public safety services include police, fire, emergency medical assistance, and emergency management. Secondary services include animal management, code enforcement, and traffic management. New and existing developments in the planning area need to address threats to public safety, including wildfires, floods, and winter storms, as well as traffic congestion during peak snowplay season. While most of these events are outside human control, preventive measures can be implemented, including management of the natural environment. Many programs are available to help residents prepare for emergencies and reduce risks of fire and other hazards.

### VISION

We envision a community where residents have prepared for wildfires, floods, and storms, criminal activity is rare, and fire and emergency response is prompt and effective.

### WILDFIRE MANAGEMENT

Wildfire is major threat to public safety. All of the planning area is within the *wildland-urban interface* (WUI; the area where human development meets or extends into

### SURVEY RESULTS

**59% to 77%** of respondents to the Planning Committee's survey considered forest-fire protection, law enforcement, and fire and medical emergency services very important.

### *wildland-urban interface (WUI)*

The area in and around a community where the immediate or secondary effects of a wildfire would threaten a community's environmental, social, and economic values, causing serious detriment to the area's overall health and viability.



undeveloped wildlands). The planning area is nearly surrounded by Coconino National Forest. The threats of forest fire spreading into residential areas or conversely of fire in a residential area starting a forest fire are very serious concerns for the planning area. Structures most at risk are those nearest the fire; however, wind-carried fire brands (embers) may ignite structures and other fuels anywhere in the planning area. Therefore, no locations in the planning area are safe from wildfire.

The risk of forest fire greatly depends on forest conditions. Fire is a natural part of the surrounding ponderosa pine forest ecosystem, where low-severity surface fires formerly burned approximately every 5-10 years. Tree densities and fuels have increased in the forest because of tree regeneration after logging and the absence of surface fires that formerly thinned the forest. If the forest is left untreated, crown fires are certain to occur and have catastrophic results for residents. Therefore, it is essential to reduce the potential for crown fire, while at the same time prepare for fire. This involves restoring the ponderosa pine forest ecosystem to lower tree densities and fuels on public and private lands and preparing and protecting homes and other structures.

#### **SURVEY RESULTS**

**82%** of survey respondents identified management of adjacent National Forest lands as very important and **83%** considered wildfires a very important issue of that management.

In 1996, two forest fires near the planning area raised residents' concerns about the increasing dangers of wildfires. The Greater Flagstaff Forest Partnership, Coconino National Forest, and the U.S. Forest Service's Rocky Mountain Research Station collaborated to create the Fort Valley Restoration Project. This project was designed to test various forest treatments using long-term research and monitoring. The Fort Valley area was chosen because of high forest density, the threat of crown fire moving upslope onto the San Francisco Peaks, high recreational use, proximity to developed areas, ease of forest accessibility, and concerns for area wildlife. The objective was to create a forest resembling conditions present before settlement by non-natives, i.e., open and park-like, with scattered groups of trees of higher densities interspersed with natural openings. Treatments have been ongoing since 1999.

The National Fire Protection Association (NFPA) and other organizations have developed the Firewise Communities Program to promote development practices that reduce the risk of wildfires to communities. Firewise principles address terrain, vegetation, architectural design, building materials, and property maintenance to enhance the survivability of WUI communities. A critically important component of these principles is creation of *defensible space* around homes to reduce the spread and intensity of wildfire, make it easier for firefighters to defend homes, and prevent a house fire from spreading to other areas. There are many actions a homeowner can take to protect property from a wildfire, such as choosing noncombustible roofing and other building materials, thinning trees and other flammable vegetation on the property, relocating woodpiles and other fuel sources away from structures, and incorporating noncombustible materials into landscaping. The Summit Fire District, serving Fort Valley and South Fort Valley, has a program to conduct free assessment of fire danger on individual properties. Moreover, funding may be available to offset thinning costs on individual properties, and Summit is actively involved with forest thinning, including burning piles of cut trees.

#### *defensible space*

The area between a structure and a potential oncoming wildfire where the vegetation has been modified to reduce the threat of ignition; this area provides an opportunity to "defend" the structure.

#### **GOAL: REDUCE THE RISK OF DESTRUCTIVE WILDFIRE.**

Policies recommended for the planning area:

1. Support the on-going efforts of the Fort Valley Restoration Project and the forest fuels reduction work of the Greater Flagstaff Forest Partnership, Coconino National Forest, Rocky Mountain Research Station, and the Summit Fire District.
2. Evaluate proposed development projects on forested properties for forest stewardship

and, if approved, require mitigation measures such as fuels reduction in the conditions of approval.

3. Encourage property owners to apply Firewise principles to building design and materials, landscaping, and property maintenance.
4. Encourage residents to develop emergency action plans that include evacuation procedures for their family and animals, identification of essential items, emergency contacts, and plans for re-uniting separated family members offsite.

### OTHER NATURAL HAZARDS

In addition to wildfire, potential natural hazards in the planning include flooding, unusual weather, earthquakes, and steep slopes. The Rio de Flag periodically floods Fort Valley after heavy rainfall and snowmelt. The County regulates construction in flood hazard areas



Fort Valley flood event,  
December 29, 2004.





under the provisions of a Floodplain Management (FPM) Overlay Zone, which is included in the Coconino County Zoning Ordinance. Although development is not prohibited in flood-prone areas, it is required to be designed to reduce potential flood damages. Floodplain Management regulations help ensure that property owners can obtain flood insurance under the National Flood Insurance Program (NFIP) and that the County can obtain disaster relief from the Federal Emergency Management Agency (FEMA).

Unusual weather can include exceptional rainfall, snowfall, and high winds. Heavy rainfall, particularly during the monsoon season, leads to local flooding in Fort Valley. Heavy snowfall can be a threat to structures, block roads, and lead to flooding when melting. High winds, occasionally including tornados, blow down trees and may affect power and telephone services. Tornados are uncommon, but passed through portions of the planning area in 2010.

The planning area and the Flagstaff area in general are located on the Cataract Creek fault system, but it has been over a century since a damaging earthquake. Fort Valley remains at moderate risk for earthquakes, according to the Arizona Earthquake Information Center at Northern Arizona University. Therefore, new construction is required to meet earthquake provisions as specified in the International Building Code (IBC) to protect against major structural failure and loss of life. However, many older structures in the planning area were not built under current codes and could be damaged by a magnitude 6 or higher earthquake.

Steep slopes and ridgelines present challenges to development, including increased fire danger (fires spread more rapidly upslope), landslides and slumping, and access for emergency response and evacuation. Coconino County has no regulations preventing development on steeply sloped properties as long as the structures are appropriately engineered for site conditions.

### **GOAL: MINIMIZE THREATS TO PUBLIC SAFETY POSED BY OTHER NATURAL HAZARDS.**

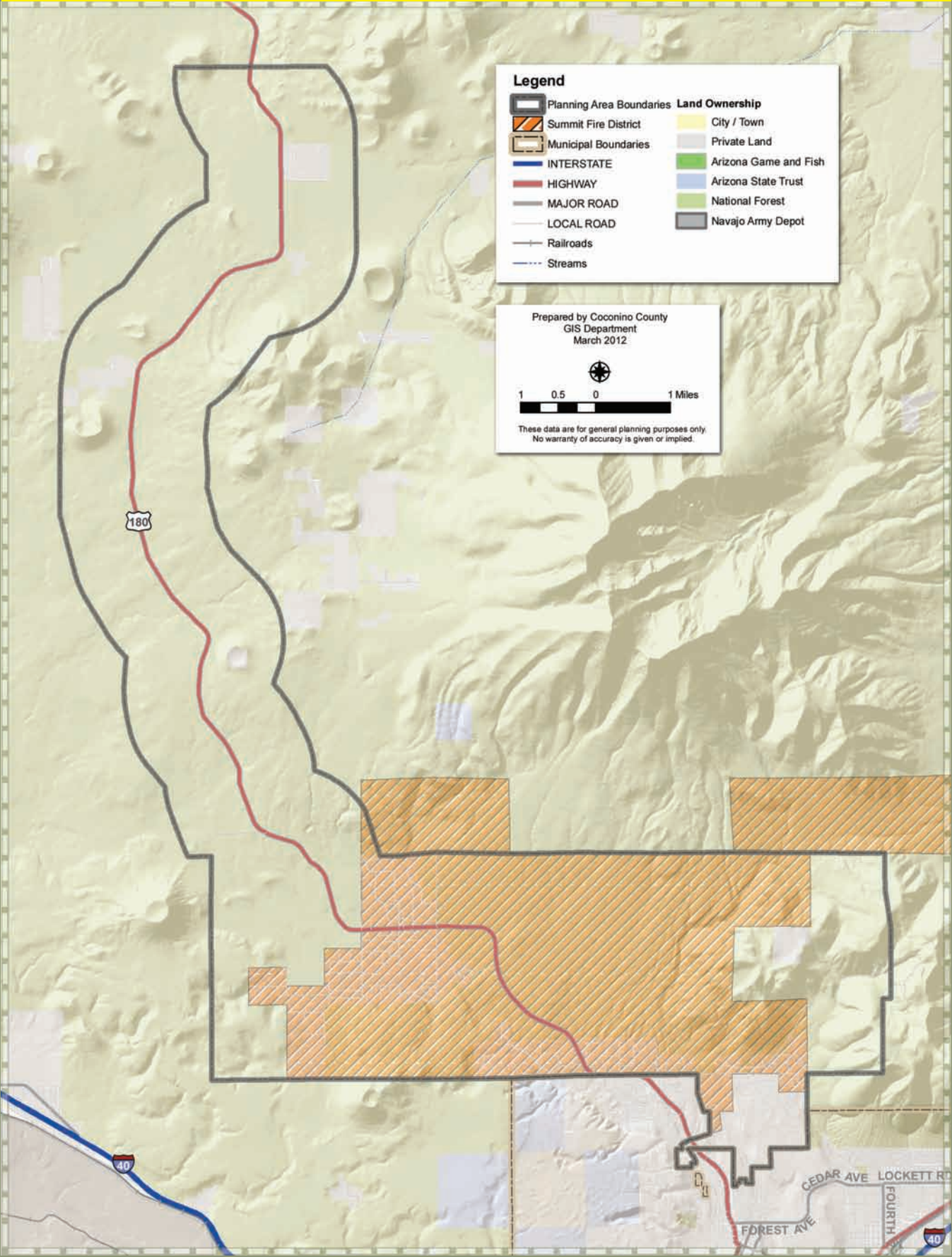
Policies recommended for the planning area:

1. Research and consider adopting an ordinance that specifies land use controls for environmentally sensitive lands (see *Environmentally Sensitive Lands*, pg. 16), including development standards for slopes and ridgelines, wetlands and riparian areas, floodplains, and critical wildlife habitat.
2. Evaluate proposed development projects for avoidance of identifiable natural hazards and adequate access for emergency response and evacuation. If approved, require mitigation measures in the conditions of approval.
3. Encourage property owners to have older homes reviewed for sufficient structural support in the event of floods, unusual weather, and earthquakes, as well when on steep slopes.

### **FIRE PROTECTION AND EMERGENCY MEDICAL RESPONSE**

The planning area currently includes two fire districts: the Summit and Lockett Ranch Fire Districts (Kendrick Park is outside any fire district). Fire protection service in the planning area previously had been disjointed, with three different fire districts, all of which contracted with the City of Flagstaff for service. Due to unpredictable service delayed by distance, need for equipment suitable to a rural setting, and increasing costs, residents pursued other alternatives than contracting with the City of Flagstaff. Currently, the Summit Fire District is responsible for fire protection and emergency medical response services.

# SUMMIT FIRE DISTRICT





### SURVEY RESULTS

Fire protection and emergency medical response services were considered very important by **71%** of the respondents to the Planning Committee's survey.



Summit Fire Department serves the planning area and has mutual aid agreements with other regional fire agencies.



Summit also serves the Doney Park, Timberline, and Fernwood areas and is connected to the planning area by land along Schultz Pass Road. It serves 118 square miles and a population of almost 10,000. The district responds to approximately 1300 emergency calls per year, with 200 within the planning area. The district has five stations, two of which are in the planning area (one in the Wing Mountain Subdivision of Fort Valley and one on Highway 180 near Hidden Hollow Road in South Fort Valley). Each is staffed 24 hours a day

with a 2- or 3-person crew and provides Advanced Life Support (ALS) response with Paramedic engines (ALS is vital because of longer response and transport times from service based in Flagstaff). Summit also provides response to accidents on Highway 180.

Issues for fire protection in the planning area include the lack of a reliable water supply, difficult one-way access to some properties, forest-fuel loading, and the absence of fire districts to serve the planning area north of Fort Valley. Two deep wells in Fort Valley may relieve some of the water supply concerns. In addition, the Summit Fire District has been able to work with the Domestic Water Improvement District to access water in Fort Valley. Defense from wildfires near or in the WUI require large amounts of water. Therefore, property owners should have water storage tanks with either special fittings or access holes for pumping water. The Summit Fire District provides free assessments of fire danger on individual properties and is involved with forest thinning, including burning piles of cut trees.

### **GOAL: ACHIEVE A HIGH LEVEL OF FIRE PROTECTION AND EMERGENCY MEDICAL RESPONSE.**

Policies recommended for the planning area:

1. Evaluate proposed development projects for fire protection measures based on recommendations of the Summit Fire District.
2. Encourage Summit Fire District to continue their efforts at public education regarding fire safety measures.
3. Encourage property owners to work with the Summit Fire District for fire assessments, providing access to water tanks, and accessing funding to offset costs of forest thinning (see *Wildfire Management*, pg. 23).
4. Encourage property owners to install address signs at driveway entrances (in coordination with the Summit Fire District) for a standardized system that identifies properties in the event of emergencies.

### **LAW ENFORCEMENT**

The Coconino County Sheriff's Office provides law enforcement as well as search and rescue services for the planning area. Its main office is in central Flagstaff in a joint facility with the Flagstaff Police Department. The patrol division of the Sheriff's Office prevents and responds to crimes in the planning area. Patrol deputies also provide services such as patrols of neighborhoods and forest roads; checks of property, business, and public welfare; motorist assistance; traffic enforcement; assistance with fire and medical calls; and public education. Some areas of the County have designated community officers who work closely with neighborhood groups and organizers. These deputies are available as a resource to residents of their assigned neighborhood; however, deputies respond anywhere in the county when on duty.

The planning area does not have a community deputy, primarily because the area has a low crime rate and funding is lacking. Residents have expressed interest in having a deputy assigned to the planning area. Legislation has been pursued to allow special taxing districts for neighborhoods to obtain community policing; however, this legislation has not been approved and currently there are no mechanisms for an individual area to contract for service. There are volunteer programs for residents, including Community Block Watch, which is a community-based crime-prevention program administered by the Sheriff's Office. Block Watch programs focus on developing a communication chain within the community, watching to protect neighbors and their homes, and reporting suspicious activity to law enforcement.





## GOAL: PROMOTE SAFE, CRIME-FREE NEIGHBORHOODS.

Policies recommended for the planning area:

1. Encourage the Coconino County Sheriff's Office to assign a community deputy to the planning area.
2. Encourage Coconino County to pursue state legislation that allows taxing districts for community policing.
3. Encourage residents to pursue one or more Community Block Watch programs and other volunteer programs with the Coconino County Sheriff's Office.



## TRAFFIC SAFETY

Traffic safety involves motor vehicles, bicycles, and pedestrians. It includes facilities (e.g., roads, trails, paths, and lanes), users' adherence to rules and regulations, and law enforcement's monitoring of traffic laws. Survey respondents provided many written comments concerning traffic management during snowplay season (including a possible Highway 180 bypass route) and bicycle safety. The planning area and the City of Flagstaff have conditions that produce extreme congestion during the peak winter recreation season, and there are limited facilities for recreationists, bicyclists, and pedestrians. Issues such as vehicle use during adverse winter weather and limited community emergency routes may generally hamper safety and specifically reduce medical emergency response capabilities.

Highway 180 is the sole *arterial* providing access to the planning area and also provides access to Grand Canyon National Park and other recreation areas such as the Arizona Snowbowl, Nordic Center, and Wing Mountain Snowplay Area. The planning area

is very scenic, making it a favorite of many cyclists, including road cyclists who ride Highway 180 and Snow Bowl Road and mountain bikers who enter Coconino National Forest. In addition, Highway 180 provides access to cultural and educational facilities. Only a small portion of Highway 180 has a pathway separated from the roadway.

### *arterial roadway*

Roadways designed to move through-traffic efficiently, at speeds as high as can be reasonable allowed in view of safety considerations and capacity.

Improvements for traffic flow and safety are needed for this highly used vehicular, cyclist, and pedestrian corridor, especially near the city limits of Flagstaff. However, traffic flow and safety can be competing concerns. For example, the addition of traffic signals and pedestrian crosswalks will slow traffic flow.

## GOAL: IMPROVE TRAFFIC SAFETY FOR VEHICLES, BICYCLES, AND PEDESTRIANS AND ACHIEVE GREATER COMPLIANCE WITH TRAFFIC LAWS.

Policies recommended for the planning area:

1. Encourage the Coconino County Sheriff's Office, Arizona Department of Public Safety, Arizona Department of Transportation, and Coconino County Public Works to continue developing traffic mitigation plans for the peak snowplay season.
2. Encourage the Coconino County Sheriff's Office to increase efforts to monitor and enforce speed limits and other traffic safety laws in the planning area.

3. Include pedestrian and bike pathways where feasible in all new developments.
4. Encourage pedestrian and bike pathways in future road improvement projects.
5. Encourage ADOT to add traffic pullouts along Highway 180 for summer use (see *Regional Planning Issues: Highway 180*, pg. 38).
6. Encourage ADOT to complete shoulder improvements along Highway 180 between the Flagstaff city limits and Snow Bowl Road to have consistent conditions that will enhance safety of bicyclists and others (see *Regional Planning Issues: Highway 180*, pg. 38).
7. Encourage ADOT and County Public Works to work with Arizona Game and Fish Department to identify and add signage to wildlife crossing points.
8. Adopt an on-going maintenance program and improved snow removal practices in County right-of-ways.

## SURVEY RESULTS

Traffic issues were considered a very important issue by **78%** of respondents to the Planning Committee's survey, second only to the natural environment.

## ANIMAL MANAGEMENT

The Animal Management Division of the Coconino County Health Department is responsible for enforcing state and county ordinances and procedures with respect to animal management issues such as vicious dogs, dogs-at-large, animal abuse, rabies control, and evacuation of domestic animals during a disaster. The Environmental Services Division of the County Health Department is responsible for enforcing the proper disposal of dog feces and horse manure, because they are a public health issue. Common animal management issues in the planning area include dogs-at-large, barking dogs, and dog bites. Cats are currently not regulated by the county and are considered free-roaming animals except in cases where animal cruelty is an issue or during quarantines. In addition, rabies outbreaks have occurred among wildlife, including skunks, foxes, and bats, and there have been plague outbreaks in Gunnison's prairie dogs (but no known transmissions of plague to humans).



Enforcement of the County's animal management regulation is important not only for protecting public health and safety and for preventing harm to wildlife and domestic animals but also for maintaining quality of life. For example, incessantly barking dogs and unleashed dogs can seriously diminish the quality of life for residents and can lead to conflicts. Solutions lie with public education, personal responsibility, and diligent enforcement.

Animal management issues involving wildlife occasionally occur. Residents who attract wildlife either on purpose or unintentionally by providing food, water, or shelter can create nuisance problems with elk, skunks, raccoons, bears, and other wildlife that can compromise residents' safety and the health of the animals. Requests for assistance can be directed to the Arizona Game and Fish Department.

Historically, the planning area has been used for cattle grazing. While no longer as prevalent, cattle grazing occurs in many areas abutting residential properties and cattle occasionally stray onto residential property. Arizona is an open range state, which means that property owners are responsible for fencing their property to keep cattle out; ranchers are not responsible for fencing their cattle in, although most ranchers work hard to keep their cattle contained. Livestock regulations are the responsibility of the Arizona Department of Agriculture.



**GOAL: ACHIEVE A HIGH LEVEL OF COMPLIANCE WITH ANIMAL MANAGEMENT REGULATIONS.**

Policies recommended for the planning area:

1. Encourage the Coconino County Animal Management Division to conduct public forums and other outreach activities to ensure that residents are well-educated on the importance of animal control for the safety of people, their animals, wildlife, and the natural environment.
2. Consider protecting birds and wildlife by including domestic cats in the County regulation that restricts free-running dogs.
3. Encourage animal owners to exercise personal responsibility in the proper care and control of their animals.
4. Discourage residents from knowingly or unknowingly attracting wildlife that have the potential to result in nuisance problems.
5. Encourage property owners concerned about the trespass of stray livestock to fence their property with wildlife friendly fencing per Arizona Game and Fish Department standards.





## UTILITIES AND SOLID WASTE DISPOSAL

### INTRODUCTION

This section addresses community services related to utilities and solid waste disposal. These services are provided by various private companies. Provision of adequate community services, including utility infrastructure, improves the quality of life for residents and increases property values.

### VISION

We envision a community well-served by utilities and waste-disposal services that have little impact on the environment, enhance efficient use of environmental resources by including recycling, and protect aesthetics.

### UTILITIES

Provision of utilities, including electric, propane, natural gas, telephone, and other telecommunications, is a critical part of community growth and development and residents' quality of life. Utility companies provide services as demand dictates and with oversight by the Arizona Corporation Commission. As the planning area has grown, so has access to public utilities. In addition, as technology has advanced for residential-scale solar and wind energy systems and satellite provision of internet and television services, individuals have more options.



Electric service is provided by Arizona Public Service (APS), telephone by Qwest and wireless companies, internet service by Qwest and satellite providers, and television by other satellite providers. Natural gas is available in some areas (primarily within existing subdivisions); most other properties utilize propane deliveries by truck. More remote parts of the planning area, such as Kendrick Park, have fewer or no public utilities available.

Development in the planning area that occurs outside of subdivisions involves property owners working individually with utility providers for service. In some areas, line extensions and related special equipment such as transformers may be cost-prohibitive for individual property owners. Development within subdivisions requires County participation through the subdivision review and approval process, which involves a Subdivision Review Committee that examines preliminary plats prior to consideration by the Planning and Zoning Commission and Board of Supervisors. Representatives of utility companies provide input on availability of service and comment on easement requirements. Coconino County also encourages developers proposing higher density residential and commercial projects outside of subdivisions to locate where utilities are available and recommends very low density rural uses where utilities are unavailable.

In considering the development of new infrastructure for utilities, it is important to understand potential environmental impacts, including habitat fragmentation, disruption of wildlife corridors, and degradation of highly valued *viewsheds*. Underground utility lines are needed in all new developments where preservation of unmarred views is important; however, placement of lines underground is currently required only in subdivisions where lot sizes are less than one acre. Construction of new high voltage lines also can have significant impacts, but placement within existing corridors or in heavily treed areas can mitigate this.

#### *viewshed*

The area of land within sight of a given location, particularly with respect to scenic views.



Wireless communication antenna on Fort Valley Road.

Wireless telecommunications towers also can be visually obtrusive, and the County has an ordinance for the development of these facilities that identifies preferred versus disfavored infrastructure. An example of a preferred infrastructure within the planning area is the antenna on an existing power pole along Highway 180 just south of its intersection with Creekside Drive. In addition, there are two facilities on National Forest land just outside of the planning area: an 80-foot tower on Saddle Mountain near Kendrick Park (this facility is slated to be replaced with two new towers) and a 125-foot tower at the Arizona Snowbowl ski area.

Alternative energy generation systems such as solar and wind systems are also expanding. The County has always allowed these systems as accessory structures that are required to meet all development standards as stipulated in the Zoning Ordinance. In 2007, the County adopted a set of special provisions for wind energy systems to help further their use. Wind and solar energy generation has allowed more development in areas lacking public utilities, such as Kendrick Park.

### **GOAL: PROMOTE SUSTAINABLE AND EFFICIENT UTILITIES COMPATIBLE WITH THE ENVIRONMENT AND AESTHETICS.**

Policies recommended for the planning area:

1. Require public utilities be located, operated, and maintained in a manner that will not degrade environmental quality or aesthetics.
2. Coordinate with electric, telephone, internet, and natural gas providers to assure that utilities are available where needed.

3. Discourage development—other than very low density residential—where utilities are unavailable.
4. Require utility companies developing new high-voltage transmission lines to utilize existing utility corridors as possible.
5. Encourage utility companies to address conservation and restoration of landscape-scale and smaller viewsheds.
6. Require underground electric and communication lines in all new subdivisions with parcel size of 5 acres or less and strongly recommend for subdivisions with lot sizes greater than 5 acres.
7. Encourage existing developed areas with above ground utilities to pursue placing lines underground.
8. Require groups forming an improvement district to investigate the feasibility of relocating utilities underground.
9. Encourage solar, wind, and other alternative energy systems and energy-efficient building techniques in all new developments.



Underground installation of utilities in Majestic View subdivision.

### **SOLID-WASTE DISPOSAL**

Residents of the planning area either contract for garbage collection or haul their own. The nearest landfill is located in Doney Park northeast of Flagstaff, almost 20 miles from Fort Valley. This landfill serves the entire Flagstaff area. It is operated by the City of Flagstaff and is subsidized by Coconino County based on estimated population in unincorporated areas and usage by County residents. The lack of facilities sometimes results in increased illegal dumping on public land, and the U.S. Forest Service lacks funds and manpower to effectively deter this. The County also assists with waste disposal in rural areas by periodically providing free dumpsters for community clean-ups. The County also works with the Flagstaff landfill to provide free waste disposal on community clean-up days.

It is important that residents of the planning area reduce the amount of household waste by reducing consumption, reusing, and recycling. Recycling services within the planning area are currently limited to the few commercial solid-waste haulers that offer recycling pick up. However, residents can use recycling facilities in the City of Flagstaff such as the Materials Recovery Center, which takes many different types of products including cardboard, paper, steel, aluminum, plastics, and glass. Residents with hazardous waste such as motor oil and other automotive waste, batteries, light bulbs, electronics, and paints can take them to the Hazardous Products Center at the Flagstaff landfill. Automotive oils are also accepted at most automotive repair companies for a fee, and compact fluorescent bulbs can be returned at major hardware stores. Coconino County also has a facility for the disposal of tires within the City of Flagstaff.

Construction and yard waste, including leaves and limbs from trees and shrubs, make up a significant portion of the material taken to the Flagstaff landfill. Construction wastes should be evaluated at the construction site to determine which materials can be reused for other purposes. There are several places in Flagstaff where construction materials can be resold or donated. Also, most construction materials, not just lumber products, can be



ground up and used for onsite landscaping or underlayment for driveways and roads, as well as for top cover in the Flagstaff landfill. Yard waste also can be used onsite, and there are several locations where yard debris such as tree limbs can be taken to be chipped into mulch that is free for use in landscaping. Yard and food waste also can be composted. Educational materials for composting are available online and from several places in the region, including the Flagstaff Arboretum.

**GOAL: REDUCE SOLID WASTE AND MINIMIZE THE IMPACT OF ITS DISPOSAL.**

Policies recommended for the planning area:

1. Consider requiring licensing of all waste-disposal companies and requiring them to offer recycling of paper, plastics, metals, and glass.
2. Develop alternatives for solid-waste disposal and recycling such as contracting with the City of Flagstaff, providing neighborhood dumpsters and recycling bins, and establishing a compacting station.
3. Enforce current ordinances and regulations regarding solid-waste disposal.
4. Educate and encourage residents to reduce their waste through reducing consumption, increasing reuse, and recycling.





## TRANSPORTATION

### INTRODUCTION

The Fort Valley Highway 180 Scenic Corridor is a rural area with a road network suitable for low volume residential traffic. However, the planning area, being dependent on Highway 180 for access, is heavily affected by visitors who use the corridor to access recreation sites, including Coconino National Forest, Arizona Snowbowl, and Grand Canyon National Park. The snowplay season is especially challenging for traffic circulation, and at times Highway 180 is heavily congested, affecting residential traffic as well as emergency medical and fire response. While the congestion issues are often at the forefront of discussions of traffic circulation, issues regarding bicyclists and pedestrians also are important. Safe, efficient travel by all modes of transportation is a priority for the planning area.

### VISION

We envision a safe, well-maintained transportation system that enhances the quality of life of residents and visitors and provides a range of transportation alternatives. Any expansion of transportation infrastructure has low impacts on the environment, including open space, wildlife corridors, and water drainage.

### SURVEY RESULTS

Traffic was considered a very important issue by **78%** of respondents to the Planning Committee's survey and was identified as one of the top two issues this plan should address.





### REGIONAL PLANNING ISSUES: HIGHWAY 180

Most of the planning area falls under the purview of the Flagstaff Metropolitan Planning Organization (FMPO), a federally recognized regional transportation planning organization. Its membership includes Coconino County, the City of Flagstaff, and the Arizona Department of Transportation (ADOT). In December 2009, an updated Flagstaff Pathways 2030 Regional Transportation Plan (RTP) was adopted that identifies and prioritizes future transportation projects for the greater Flagstaff region for driving, public transportation, walking, and biking. The primary purposes of the RTP are to obtain federal funding for transportation improvements, maximize the transportation network, and provide efficient, safe transportation routes.

The urban/rural transportation interface along the Fort Valley corridor.



The RTP focuses on the distribution of activity centers that were identified through a regional planning process involving the City of Flagstaff and Coconino County. Activity centers are areas of concentrated activity such as shopping, services, and community uses. Two potential activity centers identified within the planning area are the intersection of Highway 180 and Fremont and Schultz Pass Roads, where a mostly undeveloped commercially zoned parcel is located, and the intersection of Highway 180 and Snow Bowl Road. However, it is unlikely that these will become actual activity centers in the near future. Other possibilities within the planning area include a historical and cultural activity center in the area where city and county jurisdictions overlap along Highway 180 and seasonal snowplay areas along 180. These potential activity centers may significantly impact the planning area's transportation system, and the historical and cultural activity center would necessitate slowing traffic and improving safety for pedestrians. It is possible to pursue a transportation enhancement project through ADOT to make such improvements.

ADOT has authority for the development, improvement, and maintenance of Highway 180. ADOT develops a state-wide, 5-year plan that determines which projects are to be completed in the immediate future. The plan is updated yearly to reflect available funding. Typically, only a few projects for the Flagstaff region are included in the plan, and funding for Highway 180 competes with funding for Interstates 17 and 40. Highway 180 is considered a relatively low-volume highway but is congested during the snowplay season. Ideas for

addressing congestion include dispersing snowplay areas throughout the region, improving conditions and increasing use of alternative feeder roads that access Highway 180, upgrading 180, and developing alternative routes from 180 to Interstate 40.

The Regional Transportation Plan identifies a Highway 180 Corridor Mobility Study Area (with undefined boundaries). The intent is to identify a bypass or alternative route to alleviate winter congestion on Highway 180, a topic that has been discussed for the last 20 years. The route would connect Interstate 40 to Highway 180 north of Flagstaff's city limits. This would reduce the number of vehicles using Flagstaff's Milton Road and Humphreys Street, which are major bottlenecks in accessing snowplay areas, and thereby reduce traffic congestion on Highway 180.

However, the idea of a bypass has been controversial. Reasons include diverting tourist traffic from Flagstaff businesses, disrupting environmentally sensitive areas including wildlife corridors, altering quiet residential areas near any bypass route, and cost. The FMPO, in conjunction with the Snowplay Task Force, has proposed a study to examine different alternatives for alleviating winter congestion, including improvements to the existing Highway 180 such as larger shoulders or reversible lanes, improvements to U.S. Forest Service roads to be used as temporary alternate routes, and shuttle-bus service to snowplay areas. The Planning Committee decided not to attempt to resolve the winter congestion issues because it recognized that a regional, broad-based approach is needed and is being pursued by other governmental entities.

Other future ADOT projects may include repaving from Columbus Ave. in Flagstaff to Snow Bowl Road by 2015 and installation of a traffic signal at the intersection of Fremont and Schultz Pass Roads with Highway 180. The infrastructure for the signal is in place, but traffic has not yet met federal standards for a signal. Property owners who responded to the Planning Committee's survey indicated that this location needs a traffic signal and crosswalk. The addition of Flagstaff Arts & Leadership Academy, a charter school, at this intersection may trigger installation of the signal and crosswalk.



### **GOAL: DEVELOP A SAFE, EFFECTIVE, BALANCED REGIONAL TRANSPORTATION NETWORK.**

Policies recommended for the planning area:

1. Work with the Arizona Department of Transportation and private property owners to ensure that road improvement projects enhance neighborhood and community character, environmental sustainability, safety, and the economy.
2. Improve the Highway 180 corridor to increase safety for all modes of transportation, including motorized vehicles, bikes, and pedestrians, especially where public facilities such as schools are located.
3. Continue to work with ADOT, U.S. Forest Service, City of Flagstaff, and FMPO to alleviate snowplay congestion along Highway 180, including dispersing snowplay areas throughout the region.



4. Encourage ADOT to widen shoulders along Highway 180 between the Flagstaff city limits and Snow Bowl Road to have consistent conditions that will enhance safety of bicyclists and others (see *Traffic Safety*, pg. 30).
5. Encourage ADOT to provide additional parking areas along Highway 180 for summer use (see *Traffic Safety*, pg. 30).
6. Coordinate efforts among the County, City of Flagstaff, and ADOT to enhance pedestrian and public transportation and the aesthetic appearance of Highway 180 in the area of a possible historical and cultural activity center at the southern end of the planning area (see *Fort Valley Historical and Cultural District*, pg. 56).
7. Review the intersection of Highway 180 and Fremont and Shultz Pass Roads for compliance with federal standards for adding a demand-actuated traffic light.
8. Pursue planning assistance grants to identify multimodal transportation needs, current deficiencies, and potential improvements along Highway 180.



FUTS Trail on Fort Valley Road.

### ALTERNATIVE MODES OF TRANSPORTATION

As a popular recreation corridor, the planning area is frequented by bicyclists, runners, hikers, and others. This suggests potential use of alternate modes for transportation for everyday commuting. A paved pathway along the southern portion of the Highway 180 corridor provides a safe option for pedestrians and bicyclists. It connects with the Flagstaff Urban Trail System (FUTS), Bikeways, and Mountain Line bus transit system to access locations throughout Flagstaff. These resources are easily accessed by many residents of South Fort Valley, but not other residents of the planning area.

The expansion of public transit, pedestrian walkways, and bikeways in the planning area is inhibited by relatively low-density housing, which raises costs because greater distances need to be traveled. However, alternative modes of transportation become increasingly viable as the population of the planning area increases, more vehicles are added to area roads, and the price of gasoline increases. Although the regional transportation plan currently does not identify the extension of either shared-use paths or the existing public transportation system from the city limits of Flagstaff further into the planning area, it does identify future development of bike lanes or shoulders along the Highway 180 corridor to near Kendrick Park. These proposed lanes or shoulders will increase safety of bicyclists and pedestrians within the planning area.

### GOAL: INCREASE THE USE, SAFETY AND CONVENIENCE OF ALTERNATIVE TRANSPORTATION MODES.

Policies recommended for the planning area:

1. Explore the feasibility of enhancing and expanding local transit services into the planning area.
2. Support coordination of Coconino County, ADOT, U.S. Forest Service, and private land owners to ensure adequate bicycle and pedestrian infrastructure.
3. Encourage incorporation of pedestrian and bicycle travel infrastructure into the development of collector and arterial roads.
4. Require new County roads have right-of-ways for future bus stops and bike lanes where desirable.
5. Evaluate development projects for access by alternatives modes of transportation and encourage infrastructure for same, especially when connections can be made to existing infrastructure.

## EXISTING ROAD SYSTEM

Roads in the planning area developed in response to changes and increases in land use, with the earliest roads providing access to ranches and National Forest land. The number of roads grew as large tracts of private land were divided and residences established. Subdivisions in the 1950's, 60's, and 70's were established with roads constructed to County design standards. Areas of lot splits, such as the Mt. Elden Lookout Road area, developed without benefit of proper design standards. Roads in these areas are typically undersized and poorly surfaced and can be impassable in poor weather. Such inadequate roads proliferated as the residential population grew.

Most public roads in the planning area are the responsibility of the Coconino County Public Works Department. The County classifies three road types for purposes of maintenance. One is a U.S. Forest Service Co-op road, where the Forest Service owns the right-of-way but the County does maintenance under contractual agreement. Co-op roads include Fort Valley Ranch and Round Tree Roads and a portion of Mt. Elden Lookout Road. The second type is a grandfathered road. Arizona Revised Statutes allow counties to provide maintenance on roads that were maintained for 10 years or more prior to 1960. Maintenance on these roads is limited to blading, and no new road materials may be added by the County. Examples include Hidden Hollow Road and Country Club Spur. The third type is a County road that has been dedicated to and accepted by the Board of Supervisors. Examples include Harmony Lane, Forest Hills Road, and roads within most of the County-approved subdivisions except where they are kept as private roads. Paved County roads in the study area include Magdalena, Bader, Cossette, Suzette, Lake Trail, Chambers, Rudd Tank, Schultz Pass, parts of Antoinette and Mt. Elden Lookout, and roads in Wing Mountain, Majestic View, and Ranch at the Peaks subdivisions.



Rural road conditions on Roundtree Road.

The Coconino County Subdivision Ordinance includes definitions and minimum design standards for a range of road classes: primary arterial, secondary arterial, **collector**, local street, and alley. The County Public Works Department has a more detailed functional classification system for County roads that may be required for future development: minor arterial, major collector, minor collector, connector, residential local, narrow residential local, and country lane. The road classification and design standards are primarily applicable to new developments and do not have much bearing on existing County roads except where those roads are eligible for funding from state or federal sources.

### **collector roadway**

Typically, a rural route of primarily intra-county importance that funnels traffic between local streets and the arterial roadway system.

Minor land divisions, i.e., lot splits, have played a significant role in the evolution of the road system of the planning area. The County historically has had little authority to regulate this type of development, compared to subdivisions. Coconino County was the first county in



Arizona to adopt minimum standards for land divisions. Under the Private Road Standard Ordinance adopted in 1995 as an amendment to the building code, the county requires each new parcel created to have an all-weather road capable of carrying a 42,000 pound vehicle. The Zoning Ordinance specifies the minimum easement width, and Private Road Standard Ordinance specifies the surface-width requirements based on lot size.

### **GOAL: PROVIDE A SAFE, EFFECTIVE, AND ENVIRONMENTALLY SENSITIVE ROAD SYSTEM.**

Policies recommended for the planning area:

1. Coordinate collaboration among the County, ADOT, and the U.S. Forest Service to encourage the maintenance, improvement, and redevelopment or restoration of existing transportation infrastructure.
2. Design and develop transportation infrastructure in developments and subdivisions to promote energy efficiency, protect air quality, and preserve historic, scenic, and environmental resources, including important natural areas and wildlife habitat and corridors.
3. Design and dedicate new roads for possible future extension into potentially developable areas.
4. Coordinate plans for proposed development with existing and proposed roads.
5. Evaluate proposed development projects for impacts on the existing transportation system and, if approved, require appropriate mitigation measures in the conditions of approval.
6. Require proposed developments to limit pass-through traffic on existing local streets with adequate mitigation.
7. Incorporate bike lanes and storm water management measures in new arterial roads where feasible.

#### **Highway User Revenue Fund (HURF)**

Federal and state funds generated by gasoline taxes and vehicle license fees distributed to counties and the main source of funding for country road maintenance.

#### **improvement district**

A local unit of government (other than a city or county), authorized and regulated by statute, that is established for road improvements, water control, irrigation, port districts, fire, hospital, sanitary districts, and regional air quality control.

### **ROAD IMPROVEMENTS**

The County maintains a Capital Improvement Plan (CIP) for scheduling necessary improvements of County collector-level roads. These include improvements in drainage and installation of asphalt millings; however, projects may be limited to where the County has adequate right-of-way. In addition, uncertainty of funding from the Arizona *Highway User Revenue Fund* (HURF) makes it difficult to schedule County road projects.

Major road improvements such as paving, if not completed by the original developer, must be done through the formation of a Road Improvement District. In most cases, such districts provide the only mechanism by which residents living on unpaved, private roads can successfully involve residents and assemble the resources to have those roads improved to standards for acceptance into the County road system. The creation of *improvement districts* is a citizen-driven process. A district can be formed by a petition signed by over half of the property owners. All costs of the improvements are financed by all the property owners within the district. Properties in the district are assessed costs based on a formula developed by the project engineer. The assessment is a lien against the property and can be paid in cash or financed over ten years, with payments made semi-annually. Examples of roads improved through this process include Hashknife Trail and Rudd Tank Road.

In situations where property owners want to support road improvements but do not necessarily want to improve the road to county standards, an improvement district can be formed for the purpose of maintenance. Roads must be improved to a minimum County-defined standard, including meeting access standards of the State of Arizona Fire Code. Roads within maintenance districts are not County system roads and therefore are not

maintained by the County. Instead, a private company maintains the road through a contract administered by County staff. Property owners may pay their assessment in cash once the improvements are made or finance the cost over ten years. Maintenance costs are paid annually as long as the district is in existence.

Property owners also may create private agreements for improvement of private roads. For example, a private group owns and maintains most of Antoinette Way.

### **GOAL: ENHANCE AND UPGRADE THE EXISTING ROAD SYSTEM.**

Policies recommended for the planning area:

1. Design and build road improvements that minimize air, water, and noise pollution.
2. Require road improvements for new development projects to conform to current County standards where feasible.
3. Facilitate the formation of improvement districts for previously developed areas, and fully inform land owners as costs are incurred.
4. Discourage paving waivers for all new subdivisions except low-density subdivisions where the roads are to remain privately owned and maintained.
5. Consider installation of bike lanes with significant road improvement projects.

### **ROAD MAINTENANCE**

County roads within the planning area are maintained by the County Public Works Department, using funds from Arizona HURF generated from gasoline taxes and vehicle license fees. The amount distributed to counties has sharply declined in recent years. No property taxes are used for the maintenance of County roads. Maintenance for existing paved roads includes crack-filling approximately every four years and chip-sealing about every seven years. Unpaved roads are scheduled for grading 2-24 times per year depending on road use. Guidelines for maintenance can be obtained from the County Public Works Department. Maintenance of private roads is the responsibility of the owners. The maintenance of County and private roads should be designed to avoid impacting environmentally sensitive areas.

Snow removal on County roads is also handled by the Public Works Department. Collector roads have highest priority and are plowed as necessary to keep them open. Private roads are the responsibility of the owners, who either do their own snow-plowing or contract with private companies. Snow-plowing often damages mail boxes and drainage culverts, but the County does regular maintenance to repair them. If the repair work is not completed, homeowners should contact the County Public Works Department.

Activities within the Coconino County right-of-way, including installation of driveways, culverts, landscaping, other improvements, or special events, are regulated by permits issued without charge by the Public Works Department. Activities are regulated to ensure no damage occurs to County roads and that snow removal is not hampered.





The County allows residents to apply dust suppressants on unpaved County roads. The County must approve the material to be used, issue an encroachment permit, and prepare the road for application. Suppressants work poorly on some surfaces, including cinders. Once material has been applied, the County limits grading on the road to prolong the life of the suppressant. Suppressants adhere to the surface of the road, reducing the lifting of small particles by vehicle tires and wind. Regular applications are required to be effective. There are many suppressants, including water, organic petroleum products, animal fats, vegetable oils, electrochemical products, synthetic polymers, and clay additives. The appropriate product depends on the road surface and is determined by the Public Works Department with regard to potential impacts to groundwater quality, surface water sources, and local vegetation.

Maintenance that affects roadsides creates habitat for invasive plants that depend on disturbance for initial establishment. Once present along roadsides, these plants are more likely to spread into nearby areas.

### **GOAL: IMPROVE THE QUALITY AND MAINTENANCE OF ALL ROADS.**

Policies recommended for the planning area:

1. Use road maintenance practices that do not affect flood-prone and other environmentally sensitive areas (see *Environmentally Sensitive Lands*, pg. 16).
2. Require steps to prevent the establishment and spread of invasive plants with road maintenance (see *Vegetation*, pg. 11).
3. Encourage residents to pursue appropriate dust abatement measures on unpaved private and County roads.



*Photo courtesy of Fort Valley Experimental Forest.*



## OPEN SPACES, NATURAL AREAS AND OUTDOOR RECREATION

### INTRODUCTION

Open spaces, natural areas, and outdoor recreation are of great importance to the Fort Valley Highway 180 Scenic Corridor. They, along with scenic views and rural setting, provide much of the basis for community identity and for tourism. Coconino National Forest is a primary focus because it offers many recreational opportunities, surrounds most residential areas, and makes up much of the planning area. The open spaces and natural areas in and adjacent to the planning area provide abundant trails for hikers and mountain bikers, many camping locations, various types of winter recreation, and wonderful scenery.

Protection of open spaces and natural areas can be in conflict with use by recreationists, and cultural concerns of Native Americans and others can add complexity to issues. For example, successful conservation of sensitive ecosystems, wildlife habitats, and cultural resources may require limited or no recreational use. Sound decisions are needed to protect resources from degradation, accommodate recreational uses, and address cultural concerns. Striking a balance is an important issue for residents and non-residents.



## SURVEY RESULTS

The Planning Committee's survey showed that property owners are (a) more interested in the conservation of open space than in the development of recreation facilities and (b) not interested in sharing the cost of such facilities.

### *County Parks and Open Space program (CPOS)*

A program of the Coconino County Parks & Recreation Department to identify and conserve open space, natural areas, and lands with high recreation and scenic value.

### *conservation easement*

A legal property interest or right granted by the landowner to another party to maintain or limit use of the land to conservation purposes, typically to maintain its natural state and preclude future development.

### *transfer of development rights (TDR)*

A transfer of the right to develop or build from one portion of a property to another portion, or from one property to another property.

## VISION

We envision a planning area with protected public open spaces and natural areas, including preservation of sensitive habitats and scenic vistas, and increased opportunities for outdoor recreation.

## OPEN SPACES AND NATURAL AREAS

The Greater Flagstaff Area Open Spaces and Greenways Plan was adopted in 1998 as an inter-agency effort to provide guidance in protecting and maintaining existing open spaces in the Flagstaff region, including the planning area. The Plan divides the region into "Landscape Districts" and identifies existing National Forest and State Trust lands as open space with either high or low priority for retention. All public lands within the planning area are National Forest (State Trust lands are nearby on Observatory Mesa, and Arizona Game and Fish Department has a management area near Hart Prairie). All of the lands in or near the planning area are designated as high priority for retention. This reduces the possibility of them being conveyed to private ownership. Past land exchanges within the planning area include the Hidden Hollow area in the late 1980s and parcels of land near Schultz Creek in the mid 1990s.

On November 5, 2002, Coconino County residents approved a capital projects initiative that raised the County sales tax by one-eighth percent for County park improvements and open space acquisition. The *County Parks and Open Space (CPOS)* program is using these funds for acquisition of seven natural areas, including open space on Observatory Mesa near the planning area. Other approaches for open space preservation other than outright purchase of the land include use of *conservation easements*, purchase of development rights, and *transfer of development rights*. A conservation easement is a legal document that limits development of property by donating or selling development rights to a nonprofit conservation organization, a land trust, governmental entity, or other organization legally entitled to hold easements. The easements are generally permanent, usually prohibit all development, and have a value of about 55% of the total development value of the property. Purchase of development rights is similar to the easement concept but may be preferable due to lack of requirements for conservation values and monitoring. The transfer of development rights (TDR) involves the sale of rights in one area to be used in another area. Counties were given legal authority in 2005 to develop TDR programs, but Coconino County has yet to develop an ordinance.

## GOAL: PROTECT AND MAINTAIN IMPORTANT NATURAL AREAS AND OPEN SPACES.

Policies recommended for the planning area:

1. Coordinate with state and federal agencies and conservation groups to conserve open-spaces.
2. Promote protection of natural resources through collaboration in acquiring, managing, and interpreting natural areas.
3. Discourage land exchanges that convert National Forest land to private ownership within the planning area (see *Gateway Corridor*, pg. 52 and *Future Growth*, pg. 69).
4. Support the creation of conservation easements and the purchase of development rights to preserve open-space areas.
5. Adopt an ordinance to allow for the transfer of development rights.

## PARKS

There are no designated County park facilities within the planning area (the closest facility is a city park adjacent to the Cheshire subdivision). County parks are constructed in





locations that serve the greatest number of residents. The planning area has many recreational opportunities, which reduces the demand for parks; however, there is no playground equipment for youth or facilities for organized sports. Schools and churches sometimes provide these, but currently not within the planning area. Such recreational resources are accessible for residents of South Fort Valley (with its proximity to Flagstaff), but less so for residents of other portions of the planning area. A park that would serve only a relatively small population is difficult for the County to justify and develop even in good economic times. A regional facility is more possible, but could add to traffic congestion.

#### **GOAL: PROVIDE A VARIETY OF RECREATIONAL OPPORTUNITIES.**

Policy recommended for the planning area:

1. Encourage new developments and community facilities such as schools and churches to provide recreation facilities available for use by residents of the planning area.

#### **RECREATION**

Nearly all recreation in the planning area occurs on Coconino National Forest and involves residents and visitors. This recreation impacts residents both positively and negatively. Many residents enjoy outdoor recreation, but recreation areas attract traffic near residential areas. Managing recreation to minimize negative impacts involves locating facilities appropriately, educating users, and fostering cooperation among agencies and landowners.

Use of off-highway vehicles (OHVs) presents a challenge for all rural areas but especially for communities surrounded by public lands. OHVs include sport utility vehicles, pickup trucks, four-wheel drive and high-clearance vehicles, all-terrain vehicles (ATVs), motorcycles, and snowmobiles. The growing numbers of OHVs and their inappropriate use have increased conflicts with other recreation user groups, increased impacts on adjacent



Flagstaff Nordic Center.

residential properties and residents, and degraded the land. All OHV users are required to obtain not only a title and license but also an OHV decal to ensure vehicles meet the required standards (such as spark arrestors) for use on public lands. On November 2, 2005, the U.S. Forest Service announced there would be travel management regulations governing OHVs and other motor vehicle use on National Forests, changing the policy of “open unless marked closed” to “closed unless marked open.” This rule is designed to eliminate cross-country travel and confine the use of vehicles to designated roads, trails, and areas, unless otherwise permitted for such activities such as cutting firewood.

Winter recreation activities greatly impact planning area residents. There are at least six designated winter recreation areas within or near the planning area: Walker Lake (parking lot near Kendrick Park), Crowley Pit, Flagstaff Nordic Center, Wing Mountain Snowplay Area, Arizona Snowbowl, and the Peak View parking area. These are located along Highway 180 and produce traffic congestion during peak snowplay season. The Northern Arizona Winter Recreation Task Force was formed in 2005 to address issues and concerns related to snowplay activities in the Flagstaff region. The number of designated and designed snowplay areas is insufficient and poorly dispersed. This task force has worked to clearly identify these areas and educate visitors on accessing them. There has been an attempt to attract visitors to Fort Tuthill County Park for winter recreation, but the park lacks sledding hills. The possibility of running shuttles from the downtown or other convenient locations to help alleviate traffic congestion has also been discussed.



Hunting is another outdoor recreational activity in the planning area. It is important not only in terms of participation, but also in terms of funding conservation efforts, because license fees for hunting and fishing fund 70% of the conservation efforts in Arizona, including managing game and non-game wildlife. Most of the planning area falls within Game Management Unit 11M of the Arizona Game and Fish Department, except the northern-most portion is in Unit 7. Archery and shotgun shooting are the only legal methods of hunting in Unit 11M, but other firearms are legal in Unit 7. Regardless of permission to hunt in an area, it is illegal to discharge a firearm within a quarter mile of a residence or building without permission of the owner or resident. National Forest lands are also used for target shooting, and this can be disturbing to area residents – a common problem for communities near public lands. Arizona Game and Fish Department plans to construct a shooting range outside of the planning area that may reduce target shooting in proximity to homes in the planning area.

Wildlife viewing is another recreational activity, and there are many sites for viewing in or near the planning area. The U.S. Forest Service has a watchable wildlife trail on the southern edge of Kendrick Park to provide an enjoyable, educational wildlife recreation experience.

**GOAL: MINIMIZE IMPACTS OF RECREATIONAL USES ON RESIDENTS AND THE ENVIRONMENT.**

Policies recommended for the planning area:

1. Encourage the planning and development of designated OHV routes and support and assist other agencies as necessary.
2. Enforce OHV laws and regulations and help develop a program to discourage the misuse of the vehicles.
3. Encourage the development of snowplay areas outside of the Highway 180 corridor.
4. Partner in the development and distribution of educational information to facilitate access to and from snowplay areas.
5. Encourage traffic mitigation improvements to facilitate access to and from snowplay areas along the Highway 180 corridor (see *Traffic Safety*, pg. 30 and *Regional Planning Issues: Highway 180*, pg. 38).
6. Encourage the U.S. Forest Service to pursue stricter gun-use policies as soon as a regional shooting range is available.
7. Support the development and distribution of educational information to address OHV use, hunting near residential areas, and other firearm use.



Backcountry skiing near Kendrick Park.



## TRAILS

Trails in and near the planning area provide outdoor recreation opportunities for residents and visitors. The Fort Valley Trail System of Coconino National Forest is one of the most popular trail systems in the Flagstaff region. It is located at the base of the San Francisco Peaks and includes shared-use trails for bicyclists, hikers, horseback riders, and motorcyclists that connect with other trails. Although it is possible to use this trail system for commuting to the City of Flagstaff, it is not a convenient or direct route. The alternative is the Flagstaff Urban Trail System (FUTS) that extends into the southern end of the planning area where it is accessible by many residents of South Fort Valley. Coconino National Forest has additional trails in and near the planning area, each with its own access point. In addition, there is unlimited off-trail hiking on National Forest and other public lands.

Among the more interesting trails are the Beale Wagon Road and the Grand Canyon—Flagstaff stagecoach line. The original Beale Wagon Road was a military road connecting Arizona's Fort Defiance and southern California. It took different routes, some of which pass through the planning area. The stagecoach line was initiated by a private company to take tourists from Flagstaff to the Grand Canyon. There were eastern and western routes, and the latter traversed the planning area.

### GOAL: DEVELOP AND MAINTAIN A TRAIL SYSTEM FOR ALL USERS.

Policies recommended for the planning area:

1. Support the development of a trails plan to address continuity of regional trail networks, provisions for non-motorized transportation, and resource protection.
2. Require new development projects to provide public access to public lands.
3. Encourage partnerships among the County, trail managers, trail users, and neighborhoods to improve trail safety and access, user information, volunteer stewardship, linkages between long-distance trails, and recognition of historic trails.





## COMMUNITY CHARACTER

### INTRODUCTION

The purpose of this element is to identify features that characterize the Fort Valley Highway 180 Scenic Corridor, including natural resources such as open spaces, vegetation, wildlife, and scenic vistas; cultural resources such as architecture, activity centers, and development patterns; and historical resources such as the Pioneer Museum. The community is rural residential surrounded by one of the most scenic environments in Coconino County, with views of the San Francisco Peaks, other volcanic landforms such as A-1 Mountain and Observatory Mesa, and miles of ponderosa pine forest with interspersed grasslands. The sweeping views of this landscape from Highway 180 make the planning area a scenic gateway to the City of Flagstaff as well as a scenic drive for those traveling to the Grand Canyon. Of course, the residents also characterize the planning area and many of them chose the area to live a Western, independent lifestyle. Residents appreciate the space they have for privacy and do not require ready access to all urban amenities. In fact, maintaining the rural character of the planning area is imperative to the community and was expressed throughout the Planning Committee's survey of property owners. Despite the individualism of residents, they are also neighborly, coming together to support and assist each other when needs arise. Residents are active, vocal, and concerned about what happens in their neighborhoods and often work together to protect resources, enhance infrastructure, and care for neighbors.



### *scenic byway or scenic corridor*

Exceptional roads that are worthy of preservation because they traverse areas with distinctive cultural, historic, natural, or other unique qualities.



Historic logging locomotive at the Pioneer Museum.



### *spot zoning*

Rezoning of an individual lot or parcel of land for a use that is incompatible with surrounding land uses; that conveys a special privilege to the individual property owner; that is not in the public interest; and that is not in accord with a comprehensive plan.

### **VISION**

We envision on-going continuity of the community character of the planning area, including protection and enhancement of natural, cultural, and historical resources and integration of residential and commercial developments into the area's aesthetic character.

### **GATEWAY CORRIDOR**

Highway 180 is a gateway corridor to the City of Flagstaff. Thirty-one miles of the highway from southeast of Valle to northwest of Flagstaff are included in Arizona's *Scenic Byway* Program as the San Francisco Peaks Scenic Road. The Scenic Byway designation is intended to promote tourism, educate the public about the road's outstanding natural, historic, and scenic resources, and encourage protection of the surrounding landscape. Most of the land along the byway is in Coconino National Forest and is managed by the U.S. Forest Service for multiple uses including timber production, wildlife habitat protection, livestock grazing, and outdoor recreation. The most appropriate uses of the private land within the corridor are ones that complement the area's residential and scenic character. It is imperative that the corridor be protected from strip commercial development, *spot zoning*, and off-site signage.

### **GOAL: PROTECT AND ENHANCE THE GATEWAY CORRIDOR.**

Policies recommended for the planning area:

1. Interact with other agencies to maintain the scenic and rural character of the gateway corridor.
2. Evaluate proposed development projects for compatibility with the Scenic Byway designation and, if approved, require mitigation measures in the conditions of approval.
3. Discourage strip commercial development and spot zoning.



4. Discourage land exchanges from public to private ownership and vice-versa, but if exchanges are approved, work with the agency to support protection of the scenic character of the gateway corridor (see *Open Spaces and Natural Areas*, pg. 46 and *Future Growth*, pg. 69).

### CULTURAL RESOURCES

Cultural resources are an important aspect of community character because they record the history of people – their languages, shelter, food, religions, recreation, family life, and transportation modes and routes. They show how land was used and how cultures were able to sustain communities. The following synopsis was provided by Susan Olberding, a local historian and author of *Fort Valley Then and Now: A Look at an Arizona Settlement*.



Left: Al Beasley at his cabin circa 1910. *Courtesy of NAU Cline Library Special Collections/Arizona Historical Society.* Above: remains of the same cabin as seen today.

Fort Valley Road/Highway 180 traverses a route that has been used for centuries because of the proximity of water sources. The treeless open areas (parks) were sites of early settlement by homesteaders. Water access was important for the homesteaders because most raised sheep or cattle. Springs included Big and Little Leroux Springs at the base of Mt. Agassiz, one of the San Francisco Peaks. A wooden structure at Little Leroux Springs may have been built circa 1877, which would make it the oldest remaining building in the planning area.

The majority of settlers who lived on their lands did so only in the summer. In the first half of the 20th century, many not only raised livestock but also grew crops such as potatoes, corn, beans, and other legumes. The Cheshire area adjacent to South Fort Valley was settled in 1906 by the Gregg family, who raised livestock and farmed. In the 1950s, their



descendants sold the land, which was then subdivided and named Cheshire. The Gregg cabin (built circa 1906) is to be reconstructed on the grounds of the Arizona Historical Society (AHS) Pioneer Museum.

Fort Valley was first settled in 1881 when John W. Young, son of Brigham Young, built a stockade in the middle of the valley and named it Fort Moroni, resulting in the name Fort Valley. In 1884, the fort was purchased by the Arizona Cattle Company, which ran enormous cattle herds using the fort as a headquarters. The former site of Fort Moroni is marked with a plaque.

Homesteading in Kendrick Park occurred by 1900, but historical records are scarce. The small community included a school between 1900 and 1950.

Scientists drawn by research opportunities on the San Francisco Peaks and in the forests included C. Hart Merriam, who observed the elevational distribution of plant and animal communities in and around the San Francisco Peaks in 1889. His base camp east of the planning area is a National Historic Landmark. In 1908, the U.S. Forest Service established the nation's first forest research facility in Fort Valley. The site originally had one cabin and one scientist, Gustaf ("Gus") A. Pearson, who had been assigned to study the regeneration of ponderosa pine. Today, research continues at Fort Valley Experimental Forest primarily through staff based on the campus of Northern Arizona University. The historic buildings have been restored, and the site is on the National Register of Historic Places.

Also in 1908, Coconino County established the Hospital for the Indigent and Poor Farm along Highway 180 in South Fort Valley. The farm encompassed agricultural land leased to local farmers to grow crops, some of which went to supporting the hospital. The hospital building is now the AHS Pioneer Museum, and the nearby Art Barn is owned by Coconino County.

### *historic preservation*

The use of measures that foster conditions under which modern society and prehistoric/historic resources can exist in harmony and fulfill the social, economic, and other requirements of present and future generations.

### *certified local government (CLG)*

A government entity that maintains a certified historic preservation program, which requires a preservation ordinance and commission, at least a part-time staff person responsible, and a formal way of identifying, registering, and protecting cultural resources.

The Museum of Northern Arizona (MNA) was founded in 1928. Its exhibit building in South Fort Valley dates to 1936. Across the Highway 180 are the historic McMillan Homestead (built circa 1886) and Potato Barn (1887). MNA developed a campus of buildings and is listed on the National Register of Historic Places. The new Easton Collection Center has won awards for its sustainable building design.

Additional historic buildings are dispersed through the planning area.

Both the National *Historic Preservation* Act and the Arizona State Historic Preservation Act list prehistoric and historic properties worthy of preservation. However, many historical resources have not been listed. Coconino County is not a *certified local government* for managing historical and cultural resources. Assistance is available from other governmental entities including federal and state land management agencies and the Arizona State Historic Preservation Office. In addition to structures, portions of historic routes and trails are in the planning area. The Beale Wagon Road, which preceded construction of the rail-



Historic Rountree Farm.

road, traverses the planning area, as does one of the Flagstaff-Grand Canyon stagecoach routes, which is marked with signs from near the end of Round Tree Road to Hart Prairie.

Archeological sites occur on both public and private lands within the planning area. Legislation such as the Federal Antiquities Act requires federal land managers to inventory and preserve archaeological and historical sites to the maximum extent possible. There are few preservation requirements for private lands, either at the state or local level. Arizona passed two laws in 1990 to protect human burial sites on both state and private lands. Private land owners must notify the Arizona State Museum if they discover human remains or intend to disturb a known burial site, but archeological sites are susceptible to loss as lands are developed. Most preservation activities that have occurred in the planning area and elsewhere have been through governmental land management agencies such as the U.S. Forest Service.

#### **GOAL: PROTECT HISTORICAL AND ARCHEOLOGICAL RESOURCES.**

Policies recommended for the planning area:

1. Protect historical and archeological sites to the maximum extent possible.
2. Support the celebration and commemoration of local history and archeology through public art, events, and interpretive exhibits.
3. Incorporate significant historic structures, if present, into property development plans whenever feasible.
4. Support the installation of interpretative signs that identify historical features such as the Beale Wagon Road, old stagecoach routes, Big and Little Leroux Springs, and Fort Moroni.
5. Support the U.S. Forest Service in preserving and protecting historical structures at the Fort Valley Experimental Forest.





Museum of Northern Arizona.

### FORT VALLEY HISTORICAL AND CULTURAL DISTRICT

Many historical and cultural sites are along Highway 180/Fort Valley Road near the city limits of Flagstaff. They are intermixed between city and county and include the Museum of Northern Arizona, Pioneer Museum, Coconino Center for the Arts, Art Barn, and Grand Canyon Trust. The Museum of Northern Arizona has a focus on the natural and cultural heritage of the Colorado Plateau and consists of 200 acres with 40 buildings, some of which are listed on the National Register of Historic Places. The Pioneer Museum is part of the Arizona Historical Society and is located in the historic 1908 Coconino County Hospital for the Indigent. Coconino Center for the Arts is a county-owned facility managed by Flagstaff Cultural Partners. It includes a 4,000-square-foot gallery and 200-seat theater. The center hosts art exhibits, art markets, concerts, festivals, fundraisers, and workshops. Grand Canyon Trust is a conservation organization with the mission of protecting and

restoring the Colorado Plateau. These various facilities are important features for not only the planning area but also Flagstaff and northern Arizona. One way to preserve community character is to develop this area as a historical and cultural district. Defining and enhancing this district would allow these facilities to promote themselves in a cohesive fashion.

The facilities of this area complement each other and define an entry to the City of Flagstaff. However, the area needs improvements: pathways connecting the facilities, pedestrian crossings of Highway 180/Fort Valley Road, trails to natural features such as the Rio de Flag, links to existing trails, a picnic area or other park-like feature, beautification efforts, and possibly small, well-designed commercial developments and residential areas. The design should promote walking instead of driving, and a map and brochure to guide visitors through the area would need to be available on-site, at the Flagstaff Convention & Visitor Center, and at other key tourism sites. Parking may need to be off-site with shuttle service.

### GOAL: DEFINE AND ENHANCE A FORT VALLEY HISTORICAL AND CULTURAL DISTRICT.

Policies recommended for the planning area:

1. Work with the City of Flagstaff to officially designate a Fort Valley historical and cultural district.
2. Pursue funding with the City of Flagstaff for master planning of the district, including a marketing strategy.
3. Collaborate with the City of Flagstaff to encourage ADOT to enhance the road corridor within the district, including pedestrian crossings (see *Regional Planning Issues: Highway 180*, pg. 38).

### SCENIC RESOURCES

Scenery is a major part of the character of the planning area. Views of the San Francisco Peaks, other mountains and mesas, and forests with interspersed meadows are cherished by residents and must be protected. Various types of development can affect scenic views including ridge-top developments, telecommunication towers, utility installations, and large structures. Sensitive architectural design, including use of natural colors, avoidance of highly reflective materials, and maintenance of a scale appropriate for the area, can be coupled with screening by forest trees to mitigate the impacts of structures. However, telecommunication towers, water storage tanks, and other utility infrastructures are often



unavoidably large and obtrusive but provide needed public services. In those cases, it is important to carefully consider all options to appropriately locate such facilities and employ mitigation measures to minimize their impact. Many of these features are regulated through the County Zoning Ordinance development standards, but can be more directly impacted by design review requirements that detail specific community aesthetic standards (see *Design Review Overlay Requirements*).

Most of the natural features within and adjacent to the planning area have limited potential for development because they are on Coconino National Forest; however, even these lands are subject to development. Moreover, they fall outside of the County regulatory process. Nevertheless, residents of the planning area can be involved in decisions by providing input to the U.S. Forest Service. Other features on public and private lands that often fall outside of County regulations include utility infrastructure such as electric and telephone lines, which are regulated by the Arizona Corporation Commission (ACC). Many people become accustomed to the visual intrusion of these features, but others find they degrade scenic resources. Also largely unregulated are the designs of single-family residential properties.

#### **GOAL: PROTECT AND ENHANCE SCENIC RESOURCES.**

Policies recommended for the planning area:

1. Encourage use of integrated conservation design (see *Residential Use*, pg. 65).
2. Evaluate proposed development projects for impacts on scenic resources and other aspects of the natural environment and, if approved, require mitigation measures in the conditions of approval.
3. Require placement of utilities underground in all new developments and subdivisions, in coordination with Arizona Corporation Commission guidelines.
4. Encourage unobtrusive design for wireless communication facilities.
5. Encourage residents to interact with the U.S. Forest Service to ensure protection and enhancement of scenic resources on Coconino National Forest.

#### ***Design Review Overlay (DRO)***

An overlay district applied to specific geographic boundaries which establish guidelines for new commercial, industrial, public, and semipublic uses. DROs require a review and approval process for exterior design, materials, textures, colors, signs, lighting, fencing, and landscaping but do not apply to single-family residential construction.





### *manufactured home*

A factory constructed dwelling unit built after June 1976 to standards established by the U.S. Department of Housing and Urban Development (referred to as the HUD Code).

### *modular home*

Also known as a Factory Built Building (FBB), a dwelling unit pre-assembled in the factory and constructed under the International Residential Code, installed on a permanent foundation, and built with exterior materials customarily used on conventionally-constructed homes.

## RESIDENTIAL DESIGN

The planning area is a distinctive community primarily due to the natural environment within and adjacent to it. Residential development has occurred slowly over many years, as reflected by the varied design of buildings. There is no single, clearly defined architectural style, but common design features in the planning area include native malpais rock, large wooden timbers, and earth-tone colors. Another design theme is the historical style of zigzag split-rail fencing. Residential uses are regulated through the County Zoning and Subdivision Ordinances, as well as private controls such as covenants, codes, and restrictions (CC&R's) and deed restrictions that are often more stringent than county ordinances. Zoning standards include minimum building setbacks from parcel lines, building heights, and minimum lot sizes, as well as regulation of fencing, accessory structures, lighting, parking, and some aspects of property maintenance. The most dramatic effects of zoning on residential development have been the low density of homes and prohibition of *manufactured homes* in most areas (*modular homes*, which may resemble manufactured homes, are permitted). County design review requirements do not apply to single-family residential development, but can provide helpful guidance for property owners and their architects, designers, and contractors (see Appendix A, *Design Review Overlay Requirements*).

Another aspect of residential construction is incorporation of sustainable building practices and use of alternative energy sources. These can alter the design of a site or structure, as well as add features such as wind turbines and solar panels.

Sustainable building practices are imperative to new residential construction, especially in areas with existing water and wastewater constraints. They are becoming more commonplace and fit with the rural aesthetic. Residents can seek assistance through the County's Sustainable Building Program which has developed guidelines for residential development.

Residential development makes up the vast majority of private-land uses within the planning area. Zoning varies from 1- to 10-acre minimum lot sizes, with 2 and 2 ½ acres being most common. The Planning Committee's survey of property owners indicated preference for large lots and opposition to urban-level densities. Most parcels have been created through a process known as a Minor Land Division (lot splits) in which a property owner splits his or her land into five or fewer parcels without developing infrastructure. This type of development often does not take into account physical attributes of the landscape, sometimes leaving parcels that are difficult to build on. With no requirements for installation of infrastructure, these parcels often have underdeveloped roads and utilities that are poorly linked to neighboring areas. In contrast, the subdivision process has minimum standards for infrastructure and improvements. Subdivisions allow for more flexibility in the design and layout of parcels, which in turn can facilitate preservation of unique natural features. Therefore, the subdivision method of developing land is generally preferred by area residents and County planners.

## GOAL: MAINTAIN AND ENHANCE THE AESTHETIC CHARACTER OF RESIDENTIAL AREAS.

Policies recommended for the planning area:

1. Encourage single family architecture that blends with community character by adhering to community design styles (see Appendix A, *Design Review Overlay Requirements*, for non-binding suggestions).
2. Encourage sustainable building practices.
3. Encourage use of alternative energy sources.
4. Encourage developers to integrate input from residents of the planning area into the design of subdivisions.
5. Encourage private land owners who create parcels through the minor land division (lot-split) process to provide utilities and infrastructure and incorporate design considerations equivalent to those required for subdivisions.
6. Encourage the use of integrated conservation design techniques such as clustering or pre-determined building envelopes (see *Residential Use*, pg. 65)
7. Encourage conservation easements, purchases of development rights, and transfers of development rights for preservation of open space (see *Open Spaces and Natural Areas*, pg. 46).



Above and opposite page are examples of residential design within the planning area.

## COMMERCIAL DESIGN

Commercial enterprises within the planning area are very limited, low-key operations that have little conflict with existing residential development. This is the development pattern favored by respondents to the Planning Committee's survey. Existing commercial development occupies historic structures as well as newer designed low-impact buildings. As an example of the latter, Peak View Market is a well-designed convenience-market and gas station, with a small-scale building on a large lot. Existing zoning allows for new commercial development.

Commercial developments are regulated through the County Zoning Ordinance development standards, which include minimum setbacks, maximum building heights, lighting, landscaping, signage, and parking. The community can have greater control over the design of commercial uses through design review requirements (see Appendix A, *Design Review Overlay Requirements*). The process of developing a DRO allows public input on how to incorporate structures into the community, beginning with initial stages of development. Many commercial projects also require review by the Planning and Zoning Commission because developers request a **conditional use permit**. Sustainable building practices and use of alternative energy are encouraged and sometimes required for approval.

## GOAL: INTEGRATE COMMERCIAL USES WITHIN THE AESTHETIC CHARACTER OF EXISTING RESIDENTIAL AREAS.

Policies recommended for the planning area:

1. Adopt design review requirements that addresses site design, as well as architectural standards for colors, materials, lighting, and signage for all new commercial, industrial, multiple-family, and public or semi-public developments (see Appendix A, *Design Review Overlay Requirements*).
2. Encourage sustainable building practices.
3. Encourage use of alternative energy sources.

## SURVEY RESULTS

The survey indicated the public wants new commercial development to be compatible with community character.

### **conditional use permit (CUP)**

A permit issued by the Planning & Zoning Commission for a use that is allowed within a zoning district after a public hearing. Approval is at the discretion of the Commission based upon certain findings of fact, and conditions are typically applied to the operation of the use.



4. Encourage developers to integrate input of residents of the planning area into the design of commercial projects.
5. Encourage the use of integrated conservation design techniques (see *Residential Use*, pg. 65).
6. Encourage conservation easements, purchases of development rights, and transfers of development rights for preservation of open space (see *Open Spaces and Natural Areas*, pg. 46).



Commercial design examples within the planning area.



## GROWTH AND DEVELOPMENT

### INTRODUCTION

The Fort Valley Highway 180 Scenic Corridor is a classic example of a rural community rich in environmental and cultural resources and recreational opportunities. It has been subject to increasing growth pressures since the early 1990's as people have sought to escape urban and suburban environments. This type of community requires special consideration in relation to planning for growth due to potential impacts on what attracted today's residents, including the natural environment, outdoor recreation, open spaces, and air quality.

Growth and development in the planning area has been shaped by physical features such as topography, water resources, and soils, as well as cultural factors including land ownership, regional attractions, population trends, market conditions, construction issues, the 1990 Fort Valley Area Plan, 2003 County Comprehensive Plan, and zoning and subdivision regulations.

### VISION

We envision future growth and development occurring in ways that benefit the planning area while preserving community character, resident's quality of life, and the natural environment.





## HISTORY

Private land within the planning area historically was used for ranching and farming, and these activities provided resources for Flagstaff. Coconino County first established a zoning ordinance in 1964, placing all parcels in the same zoning classification of “A-General” and establishing a minimum parcel size of 1 acre. Three years later, Edward Danson, Harold Colton, and Clay Lockett requested study of the Fort Valley area for possible rezoning, with a focus on the vicinity of the Museum of Northern Arizona. On June 25, 1968, the County’s Planning and Zoning Commission designated the Fort Valley Land Use and Zoning Plan as the top priority for action by the Commission and by County staff. Each of the approximately 100 property owners was surveyed to determine desired zoning, particularly regarding minimum parcel size. The zoning adopted by the Board of Supervisors on November 3, 1969 established 1-acre zoning in much of South Fort Valley, 2- and 2 ½-acre zoning in Fort Valley, and commercial zoning in three

areas along Highway 180: north of the intersection with Quintana Drive, west of the intersection with Schultz Pass Road, and southeast of the intersection with Snow Bowl Road. Multiple-family zoning was approved for the area west of the intersection of Highway 180 and Quintana Drive, and ½-acre zoning was approved for the area south of the Museum of Northern Arizona.

There was little change to zoning within the planning area until requests were made for rezoning beginning in the late 1970’s. A 1979 request to allow for a store and parking area in 10 acres northwest of the intersection of Highway 180 and Snow Bowl Road was accepted despite being controversial. A request to rezone a parcel of 1+ acres off Schultz Pass Road from single- to multi-family residential to allow for a duplex cabin with a guest ranch theme was rejected. A request to rezone from single-family residential to special district to allow a 100-room motel complex, health spa, night club, and 54 condominiums at the intersection of Shultz Pass Road and Mt. Elden Lookout Road was withdrawn due to a legal dispute with the City of Flagstaff over deed restrictions. In 1981 a zoning change was approved from residential to commercial for 4.5 acres in Kendrick Park for a neighborhood grocery store with an owner’s residence. Also in 1981, a request to change a 3.95-acre parcel along S. Snow Bowl Road from 2.5- to 2-acre minimum so that the parcel could be split was denied. A request to rezone 360 acres along Hidden Hollow Road (obtained through a U.S. Forest Service land exchange in 1986) from open space to RS-5 (Residential Single Family, 5-acre minimum parcel size) was approved. In 1987, a property in the area west of the intersection of Highway 180 and Quintana Drive was rezoned from multi-family to conditional commercial for an art gallery and owner’s living quarters. In 1989, 134 acres were rezoned in Fort Valley from AR-2.5 (Agricultural Residential, 2.5-acre minimum parcel size) to AR-2 (2-acre minimum) for the 60-lot Wing Mountain Ranch Subdivision.

### *mobile home*

A dwelling unit built on a permanent chassis prior to June 1976, capable of being transported in one or more sections, and designed to be used with or without a permanent foundation.

A new zoning district called “Rural Residential” (RR) was a direct outcome of the goals and policies of the 1990 Fort Valley Area Plan. Shortly after the plan was adopted, property owners petitioned for rezoning of all properties within Fort Valley from Agricultural Residential to RR. The RR zone prohibits the use of mobile and manufactured homes, sanitary landfills, mineral extraction operations, borrow pits, and firewood storage and sales yards which were all either permitted or allowed with a conditional use permit in the AR zone. *Mobile homes*

present at the time of the rezoning were allowed to remain as *nonconforming uses*. The zone change was approved December 5, 1990 and covered approximately 2000 acres that had 339 parcels ranging in size from 1 to 160 acres. Later in the 1990's, four down-zonings (reduction of allowed density) were approved for Snow Bowl Ranch Subdivision, Lockett Ranches, and property in the vicinity of Little Wing Mountain located off Redtail Road. Rezoning to RR-5 was approved for a 55-acre parcel along Mt. Elden Lookout Road that had been obtained by land exchange with the U.S. Forest Service. A request for rezoning from RR-2 to Planned Residential Development to allow 75 lots of 1+ acres and a 42.2-acre open space in a proposed 140-acre subdivision along S. Snow Bowl Road was rejected following opposition by area residents. A minor commercial rezoning was approved for Grand Canyon Trust. In addition, a family holding of 764 acres was subdivided into ranchettes of 36+ acres (Lockett Ranches) in 1996 after failure of a voter initiative to construct a scenic bypass highway and designate a conservation area.

From 2000 to 2010, there were only two rezoning requests. A request for down-zoning from a 2- to 5-acre minimum parcel size in part of the Fort Valley Pines subdivision was approved. A request to rezone the area designated for parking northwest of the intersection of Highway 180 and Snow Bowl Road to general commercial zoning with a conditional use permit for a snowplay area was rejected following opposition by area residents.

### CURRENT LAND USE

Of the 34,154 acres in the planning area, 86% (29,216 acres) are in Coconino National Forest. These lands are zoned as open-space (the County has no authority over federal lands, but they are zoned in the event of land exchanges). The remaining 14% (4,938 acres) are private lands. Currently, they are divided into 1159 parcels, 38% of which are currently vacant and the rest have 723 residential units. In comparison, there were 253 residential dwellings, including six mobile homes, at the time of the 1990 Fort Valley Area Plan (expansion of the planning area added only 50 parcels and even fewer residences). The primary use of private lands is residential. General commercial and parking zoning designations make up less than 1% of the private lands, and there are five public/semi-public facilities but no industrially zoned parcels or uses.

About 60% of the residential units are owner-occupied. The others are either rentals or second homes, and the proportions are difficult to determine. Homes tend to be more costly than elsewhere in the Flagstaff region, and little affordable housing is available. Land prices are high due to the amenities of the community, and development costs are also high due to water and waste-water issues. Although there is potential for additional affordable housing on parcels within the multi-family zone adjacent to the city limits of Flagstaff, it likely would require annexation into the City of Flagstaff because of costs of water and sewer infrastructure.

### GOAL: MAINTAIN A MIX OF LAND USES CONSISTENT WITH THE ESTABLISHED COMMUNITY CHARACTER.

Policies recommended for the planning area:

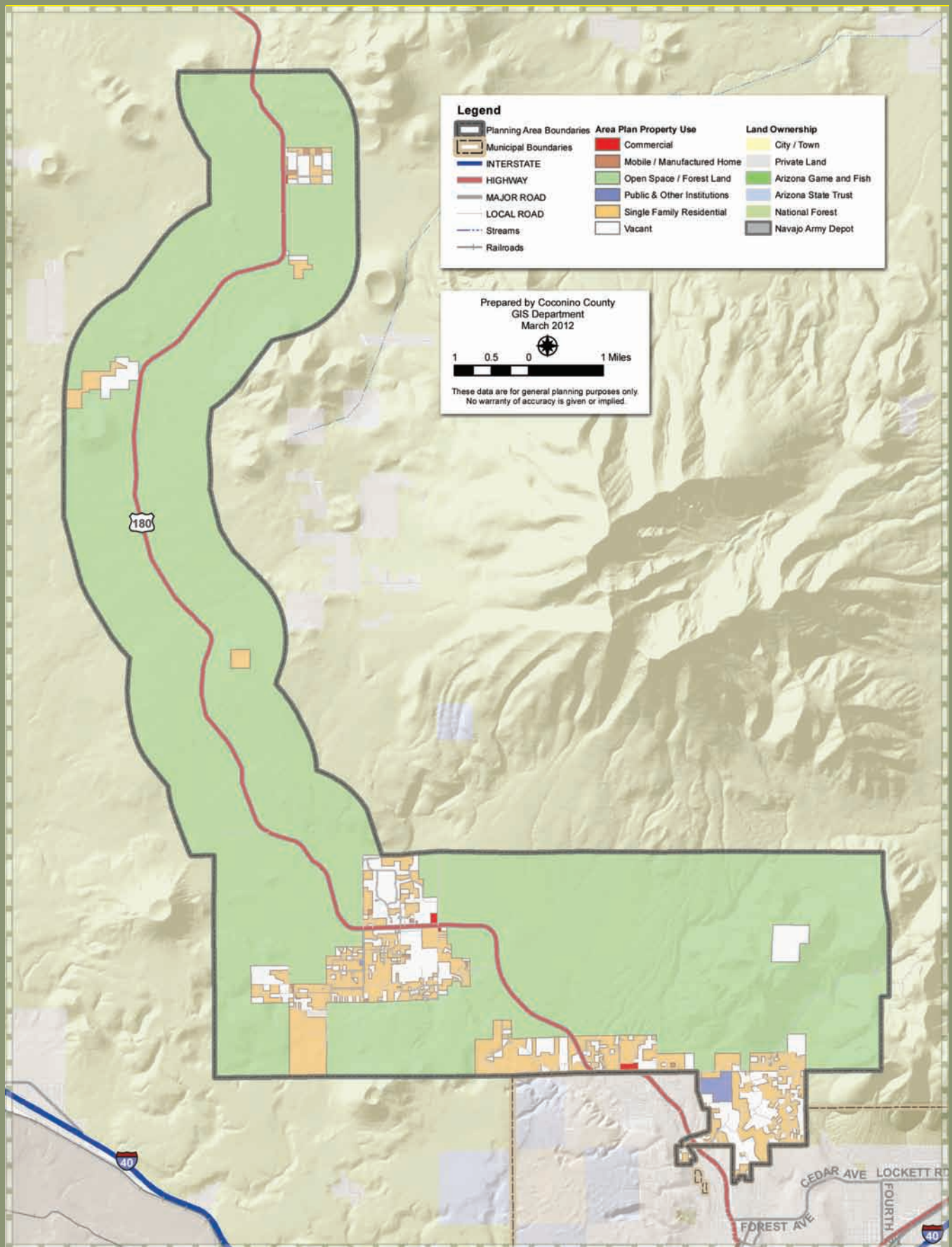
1. Maintain open-space zoning on all public lands.
2. Rezone any public lands converted to private lands to conform to the recommended policies of this plan.
3. Work with landowners and governmental agencies to maintain open spaces for the purposes of protecting scenic resources, native vegetation, wildlife, and environmentally sensitive lands.

### *nonconforming use*

A use or activity that was lawful prior to the adoption, revision, or amendment of the Zoning Ordinance or applicable Zoning classification that does not conform to present requirements.



# EXISTING LAND USE (SURVEY RESULTS)



## RESIDENTIAL USE

Residential use, the predominant land use on private lands in the planning area, is regulated under 12 different zoning designations covering a range of different classifications and densities. The majority of the planning area is zoned for a density of 1 unit per 2 acres; however, zoned densities range from as low as 1 unit per 10 acres to as high as 10 units per 1 acre (the highest densities are in the small area zoned as multi-family in South Fort Valley). Very few requests for increases in zoned density have been approved.

The population of the planning area has grown, especially between 1990 and 2000 when it more than doubled (see table; expansion of the planning area added little to population size). The average annual growth of 1.4% is similar to the City of Flagstaff, but much lower than areas like Doney Park (2.5%). Population growth influences changes in the number of parcels, and the number of parcels potentially could double under current zoning. The area with greatest potential for growth is South Fort Valley.

The planning area had four subdivision in 1989 (all dated to the 50s, 60s, and early 70s), but currently has 18 (including Kendrick Park Estates, which was added by expansion of the planning area). Subdivisions account for 30% (347) of 1159 parcels in the planning area. In addition, two unsubdivided land developments, Lockett Ranches and Tintagel (Hidden Hollow), have been added since 1989. State law allows property owners to divide land into parcels of 36 acres or more with no county oversight, although they must record a plat and obtain a public report. These two areas have been divided into smaller parcels through either subdivision or minor land division, i.e., lot splitting.

Seventy percent (812) of the parcels within the planning area have been developed through lot splitting. Before 1994, Arizona law allowed property owners to split properties three ways, but since then property can be split up to five ways without going through the subdivision process. Successive owners can continue to split large parcels to minimum lot size allowed by zoning without the dedication or construction of roads and installation of utilities. The result is usually substandard private easements, which are often no more than extended driveways. Individual owners are responsible for providing their own water and wastewater systems and for extending utility lines to their properties. Advantages to this type of development include maintenance of rural character, low density, and sometimes lower initial costs.

The County has always encouraged the development of subdivisions over lot splits. The Subdivision Ordinance was amended in 1992 to allow paving waivers for subdivisions with lot sizes of at least 2½ acres as an incentive. None of the recent subdivisions approved within the planning area have requested such a waiver, because most had an average lot size of 2 acres. The same 1992 amendment also reduced the paving width necessary for roads to be accepted by the County. When rights-of-way are dedicated to the County, lot size reductions of 10% have been allowed. This allows developers to realize the same number of lots from the overall parcel as they would through lot splits. The Subdivision Ordinance was amended again in 2004 to allow administrative approval of minor subdivisions in order to encourage small-scale development. Majestic View Ranch, a 10-lot subdivision on the north side of Highway 180 in Fort Valley, was approved through this process.

The County has advocated *integrated conservation design* or *cluster development*, especially in subdivision development, to protect important natural features such as open space, viewsheds, scenic corridors, native vegetation, and wildlife. The specific design methods in

| YEAR             | POPULATION |
|------------------|------------|
| 1980             | 350        |
| 1990             | 534        |
| 2000             | 1113       |
| 2010 (ESTIMATED) | 1490       |

### *integrated conservation design*

A development concept that considers site characteristics and layout in the larger context of surrounding parcels, and preserves important natural features such as open space, viewsheds, scenic corridors, and wildlife habitat.

### *cluster development*

A development design technique that concentrates buildings on a part of the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally-sensitive features.





this conservation-based approach vary, but frequently include clustering of development on portions of a property that are not environmentally sensitive. This allows the same number of lots that would be permitted with a conventionally designed subdivision, while providing open space. For example, a 100-acre parcel with a zoned minimum parcel size of 2 acres can have a maximum of 50 lots. With clustering, lot size could be reduced to 1 acre and all 50 lots be placed together outside of an environmentally sensitive area such as a designated flood hazard area, leaving 50 acres of open space. This currently requires rezoning to the Planned Residential Development zone (a master plan type district) even if the proposed number of lots is the same. Clustering also benefits the community by reducing rural sprawl.



Residential design elements found in the planning area.

Two subdivision projects proposed for Fort Valley used integrated conservation design. The first was a subdivision for 142 acres zoned RR-2 southwest of the intersection of Highway 180 and Snow Bowl Road. The proposal was for 75 lots of 1+ acres on 100 acres and a designated open space of 42 acres. The subdivision also would have provided a waste-water treatment system. The project was not approved due to strong opposition from surrounding property owners who were concerned about changes in the character of the area. The other subdivision, Ranch of the Peaks, was approved with modifications based on significant input from surrounding property owners. It is northeast of the intersection of Highway 180 and Round Tree Road where zoning is RR-2.5. The 185-acre subdivision has 74 lots of at least 2 acres and an 11-acre tract of meadow as open space. In addition, each lot has dedicated open space because development is restricted to relatively small building envelopes. The density (total number of lots) is the same as a regular subdivision, even though the parcels are as much as 20% smaller than allowed by the RR-2.5 zoning.

### GOAL: MAINTAIN THE RURAL RESIDENTIAL CHARACTER OF THE AREA.

Policies recommended for the planning area:

1. Consider zoning changes that would result in increased density of lots only if there are significant, clear benefits to the planning area and the changes are supported by area residents.
2. Consider rezoning large parcels as Planned Residential Development, with lot sizes dependent on the character of the planning area and input from area residents.
3. Present the goals and policies of this planning document when residentially zoned properties are annexed into the City of Flagstaff.

### COMMERCIAL USE IN RESIDENTIAL ZONES

Several different categories of commercial businesses can operate on residentially zoned land (AR, RR, and RS Zones) either as a permitted use or with a conditional use permit granted by the Planning and Zoning Commission. These include horse boarding, feed stores, commercial kennels, private schools, bed and breakfast establishments, group homes, and cottage industries (e.g., furniture making and processing of game meat). Home occupation is a permitted use that must be conducted entirely within the home, not change the residential character of the property, and not involve outside employees. Other activities require a conditional use permit. For example, cottage industries may involve up to three outside employees, have some customer traffic, occur in an accessory structure, and display

a sign (the ordinance that requires cottage industries be on county-maintained roads can be waived). Initial approval of a conditional use permit is for up to three years, and a public hearing is required for renewal.

A commercial use that has increased is vacation rentals, i.e., single-family residences rented out for periods of less than 30 days. These are prohibited under existing zoning regulations. The Zoning Ordinance defines a hotel or motel as anything rented for a period of less than 30 days. Therefore, vacation rental homes are considered hotels or motels, and these can be located only in areas that are commercially zoned. Complaints about vacation rentals in the planning area have been filed, but enforcement of the Zoning Ordinance can be difficult. There have been requests that the Ordinance be amended to allow vacation rentals; however, the County has not pursued this because of potential conflicts in residential areas.

The Zoning Ordinance allows bed and breakfast establishments within most residential zones of the planning area (with a conditional use permit). Currently there are two, one in the Hidden Hollow area and one in Kendrick Park. Both are strictly regulated; the home must be occupied by the owner and no more than two bedrooms can be rented.



### **GOAL: ENSURE COMMERCIAL USES IN RESIDENTIAL ZONES ARE COMPATIBLE WITH THE RURAL RESIDENTIAL CHARACTER OF THE AREA.**

Policies recommended for the planning area:

1. Enforce standards for home occupations and other commercial uses.
2. Require any commercial use in a residential zone (a) be incidental to the residence and (b) not change the rural residential character of the area.
3. Review commercial uses within residential zones with regard to impacts on the neighborhood (traffic, lighting, noise, water, sewage disposal, etc.) and limit approval to uses with low impact.
4. Approve bed and breakfast establishments only when compatible with the neighborhood.
5. Continue to prohibit vacation rentals within residential areas.

### **COMMERCIAL USE IN COMMERCIAL ZONES**

There are currently 40.84 acres of commercially zoned land in the planning area. They include six developed commercial parcels. The structures on the 4.24-acre parcel in Kendrick Park are currently unused. Arizona Snowbowl owns the buildings on the 3.7 acres northwest of the intersection of Highway 180 and Snow Bowl Road in Fort Valley, but the buildings are rarely used. Ski Lift Lodge occupies the 2.29-acre parcel southeast of the intersection of Highway 180 and Snow Bowl Road. The adjacent commercially zoned 3.88-acre parcel has not been developed. Peak View Market occupies a small portion of the 19.55-acre parcel north of Highway 180 in South Fort Valley. Grand Canyon Trust occupies a 1.15-acre parcel, and the American Conservation Experience occupies a 1.53-acre parcel. To the west of Lockett Ranches and north of Quintana Road are three undeveloped commercial parcels totaling 4.5 acres. The planning area has a total of 32.46 acres of undeveloped and 8.38 acres of developed but vacant commercially zoned



Commercial development located along the corridor.



property. Therefore, there are significant opportunities for new commercial development within the planning area under existing zoning.

### **redevelopment**

The reconstruction, conversion, or alteration of previously developed land or structures for new, upgraded, or different purposes.

All of these commercial parcels are adjacent to residentially zoned properties, and the existing businesses have good reputations with their neighbors. There are several commercially zoned properties with potential for development or **redevelopment** (i.e., reconstruction or replacement of buildings), and projects would need to be compatible with community character. New development on the commercially zoned properties near the city limits of Flagstaff is likely to occur only through annexation by the City due to costs of water and sewer infrastructure.

### **GOAL: ENSURE COMMERCIAL DEVELOPMENT IS APPROPRIATELY LOCATED AND DESIGNED TO SERVE THE PLANNING AREA.**

Policies recommended for the planning area:

1. Limit commercial development to those types of businesses that support residents of the planning area and are sensitive to site limitations such as water use availability and waste water disposal.
2. Limit designs for commercial development to those that (a) are respectful of existing residential land uses, (b) include mitigation such as buffering, screening, and landscaping, and (c) protect viewsheds, native vegetation, wildlife, and other aspects of the natural environment.
3. Adhere to the Zoning Ordinance performance standards and Design Review Overlay Requirements in evaluating proposals for commercial development and redevelopment (see Appendix A, *Design Review Overlay Requirements*).
4. Approve waivers from development standards only when there are obvious positive trade-offs for residents of the planning area.
5. Give preference to businesses that operate only during daytime hours.
6. Prohibit commercial and industrial rezoning.
7. Present the goals and policies of this planning document when commercially zoned properties are annexed into the City of Flagstaff.



City of Flagstaff Fire Station on Fort Valley Road.

### **PUBLIC AND SEMI-PUBLIC USE**

Public and semi-public uses are a defined category within the Zoning Ordinance. They include day-care centers, pre-schools, educational institutions, hospitals, churches, public parks, recreational facilities, community service agency camps, group homes, and public utility installations. All except home day care require a conditional use permit, and five are currently present within the planning area: two Summit Fire District fire stations, one City of Flagstaff fire station, the Majestic View Domestic Water Improvement District facility, and a chapel adjacent to Kendrick Park.

### **GOAL: ENSURE PUBLIC AND SEMI-PUBLIC USES SUPPORT NEEDS OF THE PLANNING AREA AND ARE COMPATIBLE WITH COMMUNITY CHARACTER.**

Policies recommended for the planning area:

1. Approve only those public and semi-public uses that support the needs of planning area residents.
2. Encourage public and semi-public uses intended primarily for residents of the City of Flagstaff to locate within or close to the city.



Chapel located at Kendrick Park.

3. Require proposed public and semi-public uses to conform to the area's design review requirements, including adequate landscaping, buffering and other mitigation measures to minimize impacts on neighbors (see Appendix A, *Design Review Overlay Requirements*).

### **FUTURE GROWTH AND DEVELOPMENT**

Planning for future growth and development is essential to preserving and enhancing the character of the planning area. The Flagstaff Regional Plan established Rural Growth Boundaries that identify the planning area as suitable for rural development under the existing low-density County zoning. The Regional Plan also requires new development to be consistent with local area plans and result in minimal impact. The planning area is one of the few areas in the immediate vicinity of Flagstaff that is not approaching build-out (development of all parcels and potential parcels) under current zoning; 38% of parcels are presently vacant. Existing zoning within the planning area is sufficient to allow for ample growth of both residential and commercial uses. In fact, it is possible to double the total number of parcels within the planning area under current zoning designations. Dividable parcels occur throughout the planning area, but are concentrated in South Fort Valley. These include a 40-acre parcel on Mt. Elden Lookout Road in the AR (1-acre minimum) Zone, a 90-acre parcel owned by the Museum of Arizona also in the AR Zone, and a 47-acre parcel north of Peak View Market within the AR-2 (2-acre minimum) Zone. The greatest potential for higher density development and commercial development within the planning area is also in South Fort Valley, but the economics of infrastructure for water and sewage connections may require annexation into the City of Flagstaff.

Another possibility for future growth is with reconstruction or replacement of current structures (i.e., redevelopment), especially on properties with nonconforming (but grandfathered) mobile homes, buildings predating current flood-plain designations, or buildings in disrepair. Also, land exchanges with the U.S. Forest Service may add private land to the planning area. However, there have been only two such exchanges in the planning area in



the last 25 years and planning documents, including the Coconino National Forest Plan, the Flagstaff Area Open Spaces and Greenways Plan, and this plan do not support additional land exchanges.

**GOAL: PROVIDE FOR GROWTH CONSISTENT WITH THE RURAL RESIDENTIAL CHARACTER OF EXISTING DEVELOPMENT.**

Policies recommended for the planning area:

1. Require compliance with this plan for any amendment to the Regional Plan.
2. Require infill and redevelopment to be compatible with the rural residential character of the planning area.
3. Oppose land exchanges with the U.S. Forest Service that add private land within the planning area (see *Open Spaces and Natural Areas*, pg. 46 and *Gateway Corridor*, pg. 52).

**ZONING ENFORCEMENT**

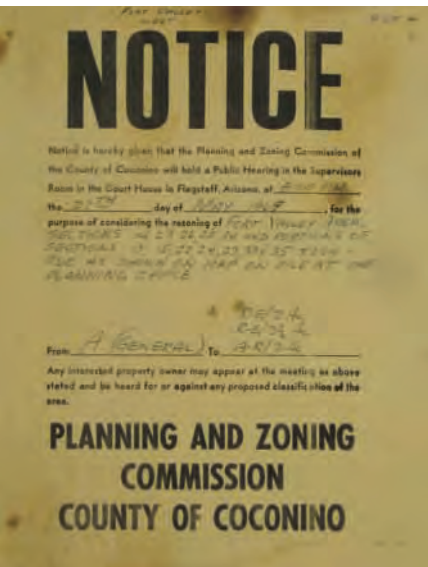
The provisions of the Coconino County Zoning Ordinance are intended to help implement the goals, objectives, and policies of the County Comprehensive Plan and local area plans. The Zoning Ordinance is also intended to promote and protect public health, safety, and welfare and to safeguard and enhance the appearance and quality of development in the County. Any land use in violation of provisions of the Ordinance is a Class 2 misdemeanor. Code Enforcement Officers are responsible for investigating alleged zoning violations and administering the enforcement provisions of the Ordinance. The officers also pursue obvious violations, particularly ones that entail serious threats to public health, safety, and welfare.

The most common violations in the planning area include vacation rentals, excessive outdoor storage of materials, outdoor storage of inoperable vehicles, lighting, and OHV tracks. Many of these complaints represent nuisance issues that interfere with the character of the planning area. The goal of enforcement is not to be punitive, but to achieve compliance, and thereby protect health, safety, and welfare important to community character. County staff provides property owners opportunities to resolve violations cooperatively before pursuing more coercive remedies through a hearing process. In situations where the responsible party fails to take remedial action, the case can be referred to Superior Court where fines and penalties may be applied.

**GOAL: ACHIEVE COMPLIANCE WITH THE PROVISIONS OF THE COCONINO COUNTY ZONING ORDINANCE.**

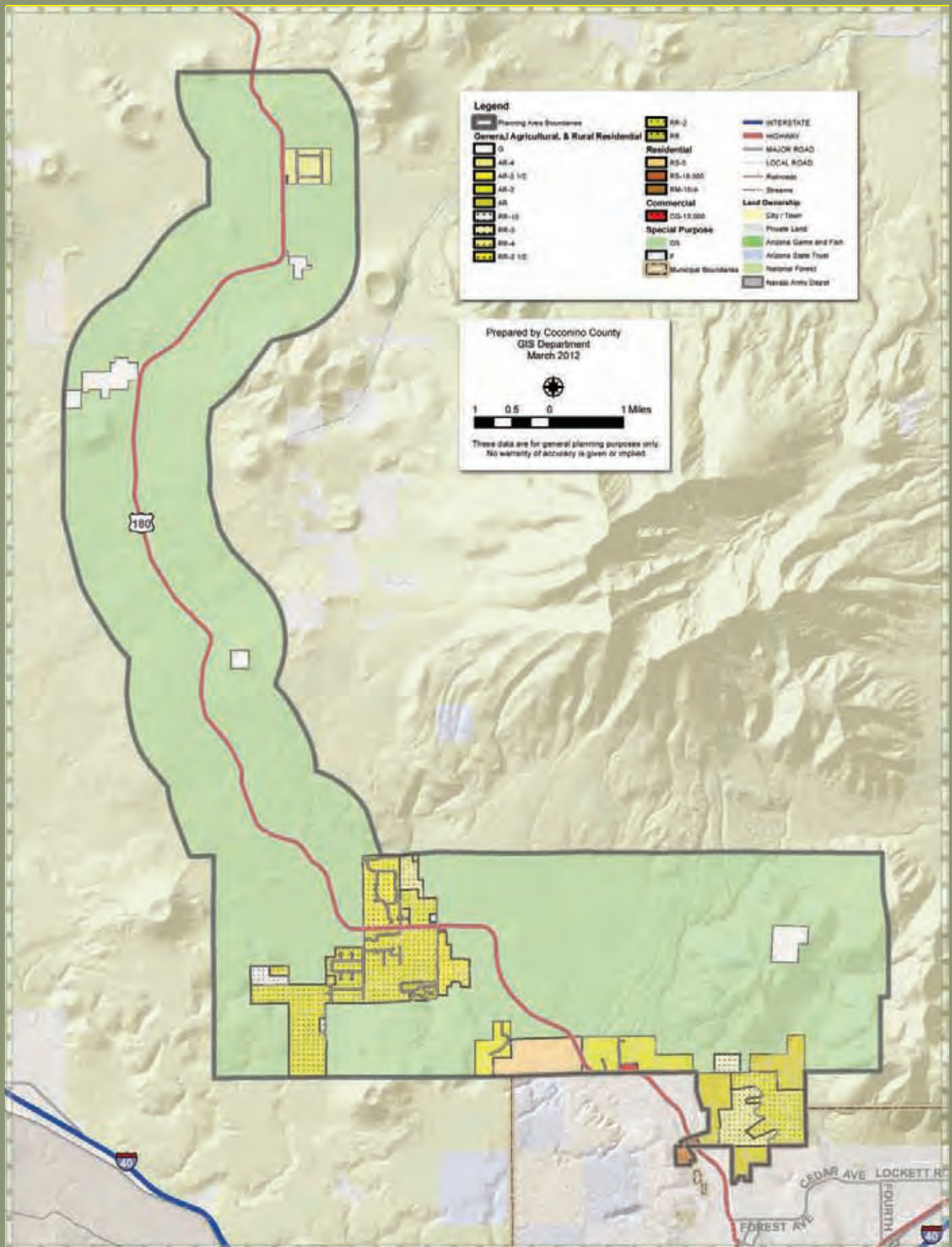
Policy recommended for adoption the planning area:

1. Protect the character of the planning area by enforcing all provisions of the Zoning Ordinance.




1969 Rezoning notice.

# ZONING





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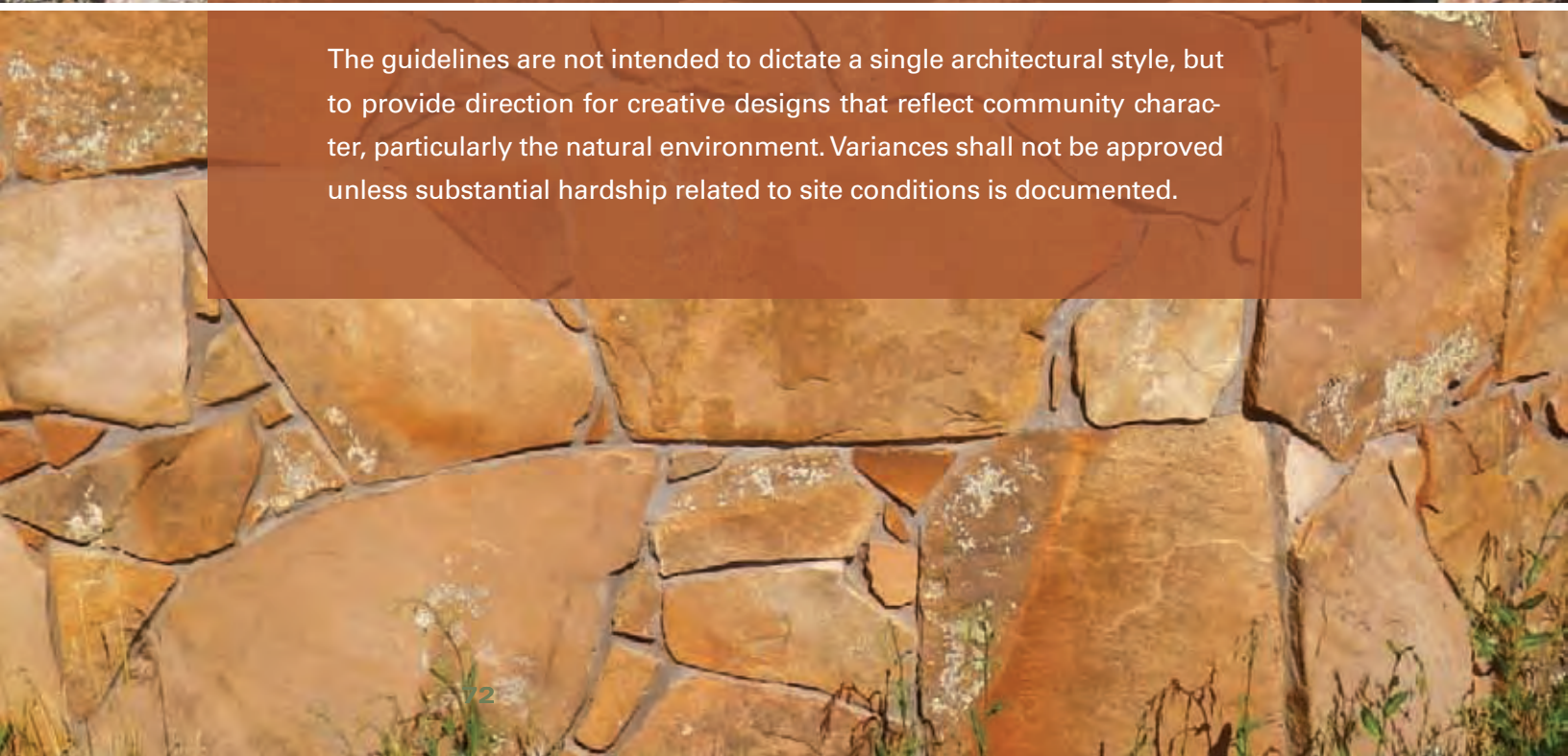
## Appendix A

# DESIGN REVIEW OVERLAY GUIDELINES

The Fort Valley Highway 180 Scenic Corridor is a rural landscape with large forested and meadowed parcels, many of which have beautiful vistas. In order to protect and enhance the aesthetic qualities of the Scenic Corridor, a Design Review Overlay (DRO) Zone is established for all new and redeveloped multiple-family, commercial, industrial, and public or semi-public uses within the planning area (see *Growth and Development* for description of these zoning categories). The DRO does not apply to private residences; however, voluntary application is strongly encouraged.

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The following guidelines are intended to integrate the built environment with the character of the planning area, especially the natural environment. The DRO will ensure that new developments and redevelopments are architecturally and aesthetically compatible with community character and their environmental impacts will be mitigated by incorporating sustainable development principles that reduce site damage and resource use during construction and operation.

The bottom section of the page features a background of large, flat, tan-colored stones. A semi-transparent brown rectangular box is centered over this background, containing the third paragraph of text.

The guidelines are not intended to dictate a single architectural style, but to provide direction for creative designs that reflect community character, particularly the natural environment. Variances shall not be approved unless substantial hardship related to site conditions is documented.



## SITE DESIGN

1. New development shall be designed to fit the existing site without radical grading, terracing, filling, or other alteration of existing terrain. Buildings, roadways, parking, and other improvements shall be integrated into the natural context of the site.
2. Buildings and other site improvements should take advantage of natural site features, such as topography, sunlight, shade, and prevailing winds, to promote energy conservation.
3. Building orientation for passive solar heat gain is encouraged.
4. Building and parking layouts shall reflect needs for snow management and snowmelt run-off. For example, parking lots and building entrances should have southern exposures where practical.
5. Alternative surfaces that are pervious but can withstand traffic levels and winter weather may be approved in lieu of asphaltic paving of areas for parking and maneuvering of vehicles.
6. Towers and poles used for communication or other purposes (excluding permitted alternative energy facilities) shall be sited in locations where they do not block or detract from views of the San Francisco Peaks or other key natural features and should be disguised to blend with the natural environment.
7. All undeveloped areas shall be maintained in a natural condition or landscaped in a manner that complements the existing natural environment.
8. Preservation of existing vegetation to meet landscaping requirements is encouraged. Site/landscaping plans shall indicate all existing trees, shrubs, and vegetated areas to remain per the Landscaping Ordinance requirements.
9. Landscaping plans shall include a mix of landscape materials such as crushed rock and boulders, as well as plants of various types and sizes. Hardscape materials (on paved areas) should blend with the natural landscape.
10. All landscape plantings (except seeded areas) shall be provided with a low-flow irrigation system sufficient to establish and maintain them in healthy condition. Systems that turn off with natural precipitation are encouraged for water conservation.
11. Alternative methods for collection of water to irrigate landscaping are encouraged. Methods include roof run-off collection systems and direction of on-site drainage to landscaped areas.
12. Adequate visual buffering from adjacent residentially zoned land shall be provided (unless waived by adjacent property owners). Such buffering may consist of landscaped berms, fencing, trees, or other acceptable mitigating methods as supported by adjacent property owners. Buffering should complement the architectural style of the commercial structure.
13. All mechanical equipment, utilities, dumpsters, and service areas shall be screened from view by walls, fences, or landscaping consistent with these guidelines and complementary to the architectural style of the commercial structure.
14. Structures are encouraged to be set back from Highway 180 to the greatest extent possible to preserve the viewshed.
15. Use of the historical style of split-rail zigzag fencing as a front landscape feature along the Highway 180 corridor is strongly encouraged.
16. All new utilities shall be underground.
17. On-site reuse of construction waste is encouraged.

## SURVEY RESULTS

The Planning Committee's survey of property owners in the planning area determined that **86%** favor design-review requirements for new commercial and public uses.



Natural elements used in site design.





Commonly used building materials.



## ARCHITECTURAL STYLE

1. Developers are strongly encouraged to participate in the Coconino County Sustainable Building Program and to review development guidelines.
2. Architectural style shall be compatible with the rural, natural landscape of the planning area.
3. The design, scale, and mass of buildings shall be in balance with natural features of the landscape and not dominate the natural setting. Buildings shall be limited to two stories and a height of 35 feet.
4. Architectural features that serve to reduce the apparent mass of buildings are encouraged. These include telescoping gable ends, variable roof forms, dormers, and clerestories.
5. Projects shall employ building design techniques that create an aesthetically appealing development while maximizing energy efficiency. Energy efficient features that aid in conservation and internal use of sunlight (daylighting) are encouraged.
6. Walls and fences shall be integrated into the overall architectural style.
7. Water catchment systems shall be placed below ground, unless integrated into the site or buildings.
8. Multiple-family housing and other multi-function developments shall cluster buildings to be energy efficient and to complement the existing aesthetics of the surrounding neighborhood.

## COLORS AND MATERIALS

1. Architectural color schemes shall be consistent with the earth-tone palette of the natural landscape. Muted, natural tones should be emphasized. Accent colors that both complement the natural environment and enhance the appearance of the structure are encouraged.
2. Building materials should blend with the natural environment and be renewable, locally produced, and resource-efficient (i.e., result in reduced energy consumption and waste output for the lifetime of the building).
3. Roofing materials and colors shall blend with the natural environment. Bright and highly reflective roofing materials are not permitted. Materials should maximize efficiency, support rain water collection, allow installation of renewable energy systems, and incorporate fire-resistant materials.

4. Natural materials such as sawn wood, logs, and native rock are recommended for integrating structures into the area's natural environment. However, high-quality, natural-appearing synthetic or manufactured materials such as fire-resistant siding, synthetic rock, split-faced block, log siding, and concrete tile shingles are acceptable if integrated into a design that is consistent with these guidelines.
5. Heavily textured materials or design elements that create shadow patterns (e.g., lap, board-and-batten, and rough-sawn wood siding) and weathered or aged metals consistent with rural design principles are encouraged.

## LIGHTING

1. All outdoor lighting shall comply with the provisions of the County Lighting Ordinance except as modified herein.
2. Every DRO application shall include a detailed lighting plan to be reviewed by the Planning and Zoning Commission.
3. All light fixtures shall be fully shielded and positioned so that all direct illumination is contained on site.
4. Energy efficient lighting is encouraged.
5. All light poles and fixtures shall be compatible with the architectural style of the development and these guidelines.
6. Light poles shall be in scale with the surrounding landscape and development and not exceed 20 feet in height.
7. All outdoor lighting shall be turned off after normal business hours, but no later than 10:00 p.m. unless specifically approved otherwise by the Planning and Zoning Commission.

## SIGNAGE

1. All signage shall comply with the provisions of the County Sign Ordinance except as modified herein.
2. Every DRO application shall include a detailed sign plan to be reviewed by the Planning and Zoning Commission.
3. Signs shall be subject to the same requirements of design, materials, and colors specified in these guidelines.
4. Signage shall be low in height.
5. Lighted signs shall be illuminated internally, except that signage constructed of natural materials may be lighted with fully shielded, downward-directed fixtures. Internally illuminated signs shall be designed with opaque backgrounds and translucent letters and symbols.
6. Energy efficient light sources are encouraged.
7. Lighted signs shall not remain on after 10:00 p.m. or the end of business hours, whichever is earlier.
8. All freestanding signs shall be located within a planter box or landscaped area.
9. Temporary banners and other temporary or portable signage shall not be permitted except for real estate "open house" signs identifying property which is for sale or lease.



Public and semi public facilities and signage examples.







## Appendix B

# GLOSSARY

**100-Year Flood:** A flood that has a one percent chance of being equaled or exceeded in any given year.

**Aquifer:** An underground geologic formation that contains sufficient saturated, permeable material to yield significant quantities of groundwater to wells and springs.

**Arterial Roadway:** Roadways designed to move through-traffic efficiently, at speeds as high as can be reasonably allowed in view of safety considerations and capacity.

**Certified Local Government (CLG):** A government entity that maintains a certified historic preservation program, which requires a preservation ordinance and commission, at least a part-time staff person responsible, and a formal way of identifying, registering, and protecting cultural resources.

**Cluster Development:** A development design technique that concentrates buildings on a part of the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally-sensitive features.

**Collector Roadway:** Typically, a rural route of primarily intra-county importance that funnels traffic between local streets and the arterial roadway system.

**Conditional Use Permit (CUP):** A permit issued by the Planning & Zoning Commission for a use that is allowed within a zoning district after a public hearing. Approval is at the discretion of the Commission based upon certain findings of fact, and conditions are typically applied to the operation of the use.

**Conservation Easement:** A legal property interest or right granted by the landowner to another party to maintain or limit use of the land to conservation purposes, typically to maintain its natural state and preclude future development.

**County Parks and Open Space program (CPOS):** A program of the Coconino County Parks & Recreation Department to identify and conserve open space, natural areas, and lands with high recreation and scenic value.

**Defensible Space:** The area between a structure and a potential oncoming wildfire where the vegetation has been modified to reduce the threat of ignition; this area provides an opportunity to “defend” the structure.

**Design Review Overlay (DRO):** An overlay district applied to specific geographic boundaries which establish guidelines for new commercial, industrial, public, and semipublic uses. DROs require a review and approval process for exterior design, materials, textures, colors, signs, lighting, fencing, and landscaping but do not apply to single-family residential construction.

**Environmentally Sensitive Lands:** Areas characterized by floodplains, springs, stream corridors, wetlands, threatened and endangered species habitat, old growth or rare vegetation, steep slopes, or other critical natural resources as determined by best available science.

**Floodplain:** the land area adjoining a river, stream, lake, or other body of water that is susceptible to inundation by a 100-year flood.

**Highway User Revenue Fund (HURF):** Federal and state funds generated by gasoline taxes and vehicle license fees distributed to counties and the main source of funding for country road maintenance.

**Habitat:** The physical and biological environment where an organism lives. Often characterized by a dominant plant form or physical characteristic, habitat includes such components as cover, food shelter, water, and breeding sites.

**Historic Preservation:** the use of measures that foster conditions under which modern society and prehistoric/historic resources can exist in harmony and fulfill the social, economic, and other requirements of present and future generations.

**Improvement District:** A local unit of government (other than a city or county), authorized and regulated by statute, that is established for road improvements, water control, irrigation, port districts, fire, hospital, sanitary districts, and regional air quality control.

**Integrated Conservation Design:** A development concept that considers site characteristics and layout in the larger context of surrounding parcels, and preserves important natural features such as open space, viewsheds, scenic corridors, and wildlife habitat.

**Invasive, Non-Native Species:** A plant species not historically found in the local area. When introduced into an area, these species proliferate, replacing native species and reducing biodiversity.

**Lot Split:** A division of land into five or fewer parcels.

**Manufactured Home:** A factory constructed dwelling unit built after June 1976 to standards established by the U.S. Department of Housing and Urban Development (referred to as the HUD Code).

**Mobile Home:** A dwelling unit built on a permanent chassis prior to June 1976, capable of being transported in one or more sections, and designed to be used with or without a permanent foundation.

**Modular Home:** Also known as a Factory Built Building (FBB), a dwelling unit pre-assembled in the factory and constructed under the International Residential Code, installed on a permanent foundation, and built with exterior materials customarily used on conventionally-constructed homes.

**Nonconforming Use:** A use or activity that was lawful prior to the adoption, revision, or amendment of the Zoning Ordinance or applicable Zoning classification that does not conform to present requirements.



**Noxious Weed:** Any parasitic or foreign plant that can injure crops, other useful plants, agriculture, livestock, fish, or wildlife resources, or public health; any plant on the Federal Noxious Weed List or the Arizona Noxious Weed List.

**Off-Highway Vehicle (OHV):** A motorized vehicle used for travel in areas that are normally inaccessible to conventional highway vehicles. OHVs include dirt motorcycles, dune buggies, jeeps, four-wheel-drive vehicles, snowmobiles, and all-terrain vehicles.

**Open Space:** A primarily undeveloped landscape that provides scenic, ecological, or recreational values or that is set aside for resource protection or conservation; an area of managed production such as forestland, rangeland, or agricultural land that is essentially free of visible obstructions.

**Prescribed Burn:** The controlled application of fire to wildland fuels in either their natural or modified state, under specific environmental conditions. Prescribed burns are confined to a predetermined area to meet resource management objectives.

**Redevelopment:** The reconstruction, conversion, or alteration of previously developed land or structures for new, upgraded, or different purposes.

**Riparian Area:** An area bordering a river or stream that supports an ecosystem of wildlife, vegetation, soils, and water.

**Scenic Byway or Scenic Corridor:** Exceptional roads that are worthy of preservation because they traverse areas with distinctive cultural, historic, natural, or other unique qualities.

**Spot Zoning:** Rezoning of an individual lot or parcel of land for a use that is incompatible with surrounding land uses; that conveys a special privilege to the individual property owner; that is not in the public interest; and that is not in accord with a comprehensive plan.

**Subdivision:** The division of land into six or more lots, parcels, or fractional interests under 36 acres, for sale or lease, including lands divided as part of a common promotional plan; also, the resulting site of subdivided lands.

**Transfer of Development Rights (TDR):** A transfer of the right to develop or build from one portion of a property to another portion, or from one property to another property.

**Viewshed:** The area of land within sight of a given location, particularly with respect to scenic views.

**Wildlife Corridor:** an often limited or constrained area providing connectivity to larger animal habitats.

**Wildland-Urban Interface (WUI):** The area in and around a community where the immediate or secondary effects of a wildfire would threaten a community's environmental, social, and economic values, causing serious detriment to the area's overall health and viability.

# Appendix C

## COMMUNITY SURVEY

| 1. What category best reflects your status in the Fort Valley Highway 180 Corridor planning area? |  |                  |                |
|---|--|------------------|----------------|
|   |  | Response Percent | Response Count |
| Full time resident (6 months or more per year) and own property                                   |  | 72.5%            | 116            |
| Part time resident (less than 6 months per year) and own property                                 |  | 10.0%            | 16             |
| Own undeveloped property  |  | 15.6%            | 25             |
| Rent my residence to others   |  | 0.6%             | 1              |
| Rent from others  |  | 1.3%             | 2              |
| answered question   |  |                  | 160            |
| skipped question  |  |                  | 4              |

| 2. What street do you live or own property on? |  | Response Count |
|--|--|----------------|
|  |  | 155            |
| answered question                              |  | 155            |
| skipped question                               |  | 9              |

| 3. Do you live in Hart Prairie? |  |                  |                |
|---------------------------------|--|------------------|----------------|
|                                 |  | Response Percent | Response Count |
| No                              |  | 92.5%            | 148            |
| Yes                             |  | 7.5%             | 12             |
| answered question               |  |                  | 160            |
| skipped question                |  |                  | 4              |

| 4. At this time the plan boundaries do not include Hart Prairie. Do you think Hart Prairie should be included within the Fort Valley Highway 180 Corridor planning process? |  |                  |                |
|---|--|------------------|----------------|
|   |  | Response Percent | Response Count |
| Yes   |  | 45.7%            | 63             |
| No  |  | 54.3%            | 75             |
| answered question   |  |                  | 138            |
| skipped question  |  |                  | 26             |

| 5. How long have you lived, owned, or leased property in the Fort Valley Highway 180 Corridor planning area? Check all that apply. |            |            |          |                |
|--|------------|------------|----------|----------------|
|  | Lived      | Owned      | Leased   | Response Count |
| Less than 1 year   | 80.0% (4)  | 60.0% (3)  | 0.0% (0) | 5              |
| 1 to 5 years   | 65.6% (40) | 80.3% (49) | 3.3% (2) | 61             |
| 6 to 10 years  | 64.3% (27) | 73.8% (31) | 0.0% (0) | 42             |
| 10 to 20 years   | 46.9% (15) | 84.4% (27) | 0.0% (0) | 32             |
| Over 20 years  | 70.2% (33) | 78.7% (37) | 0.0% (0) | 47             |
| answered question  |            |            |          | 162            |
| skipped question   |            |            |          | 2              |

| 6. What size parcel do you reside on/own? Check all that apply. |            |            |                |
|---|------------|------------|----------------|
|   | Live       | Own        | Response Count |
| Less than 1 acre  | 81.8% (9)  | 54.5% (6)  | 11             |
| 1 to 2 1/2 acres  | 64.8% (57) | 79.5% (70) | 86             |
| Greater than 2 1/2 acres to 10 acres                            | 78.4% (40) | 68.8% (35) | 51             |
| Greater than 10 acres   | 61.9% (13) | 90.5% (19) | 21             |
| answered question   |            |            | 162            |
| skipped question  |            |            | 2              |

| 7. How important are the following topics for the Fort Valley Highway 180 Corridor planning area? |             |            |                |         |                |
|---|-------------|------------|----------------|---------|----------------|
|   | Unimportant | Important  | Very Important | Average | Response Count |
| Natural environment preservation  | 1.2% (2)    | 13.7% (22) | 85.1% (137)    | 2.84    | 161            |
| Management of adjacent U.S. Forest Service lands  | 0.6% (1)    | 17.8% (29) | 81.6% (133)    | 2.81    | 163            |
| Invasive plant species  | 10.5% (17)  | 35.2% (57) | 54.3% (88)     | 2.44    | 162            |
| Floodplain areas  | 12.3% (20)  | 41.4% (67) | 46.3% (75)     | 2.34    | 162            |
| Fire wise practices (protection of residence from fire)   | 3.7% (6)    | 19.8% (32) | 76.5% (124)    | 2.73    | 162            |
| Community character   | 4.3% (7)    | 22.2% (36) | 73.5% (119)    | 2.69    | 162            |
| Air quality   | 5.5% (9)    | 14.7% (24) | 79.8% (130)    | 2.74    | 163            |
| Noise/natural quiet   | 2.5% (4)    | 9.9% (16)  | 87.7% (142)    | 2.85    | 162            |
| Light/dark skies  | 3.7% (6)    | 21.6% (35) | 74.7% (121)    | 2.71    | 162            |
| Land use  | 1.9% (3)    | 21.0% (34) | 77.2% (125)    | 2.75    | 162            |
| Commercial development  | 14.3% (23)  | 24.8% (40) | 60.9% (98)     | 2.47    | 161            |
| Lot splits  | 9.9% (16)   | 33.3% (54) | 56.8% (92)     | 2.47    | 162            |
| Residential development   | 8.6% (14)   | 30.9% (50) | 60.5% (98)     | 2.52    | 162            |
| Density (minimum parcel sizes)  | 4.3% (7)    | 17.8% (29) | 77.9% (127)    | 2.74    | 163            |
| Open Space  | 3.7% (6)    | 9.3% (15)  | 87.0% (141)    | 2.83    | 162            |
| Traffic/Circulation   | 1.9% (3)    | 19.9% (32) | 78.3% (126)    | 2.76    | 161            |
| Roads and road maintenance  | 2.5% (4)    | 34.2% (54) | 63.3% (100)    | 2.61    | 158            |
| Bicycle lanes   | 16.1% (26)  | 41.8% (67) | 42.2% (68)     | 2.26    | 161            |
| Law enforcement/sheriff's protection  | 5.6% (9)    | 35.0% (56) | 59.4% (95)     | 2.54    | 160            |
| Fire and medical emergency services   | 3.1% (5)    | 25.9% (42) | 71.0% (115)    | 2.68    | 162            |
| Water conservation  | 3.8% (6)    | 26.9% (43) | 69.4% (111)    | 2.66    | 160            |
| Water supply  | 5.8% (11)   | 18.6% (30) | 74.5% (120)    | 2.68    | 161            |
| Water quality   | 2.5% (4)    | 18.6% (30) | 78.9% (127)    | 2.76    | 161            |
| Wastewater disposal   | 8.1% (13)   | 28.8% (46) | 63.1% (101)    | 2.55    | 160            |
| Zoning enforcement  | 3.7% (6)    | 28.4% (46) | 67.9% (110)    | 2.64    | 162            |
| Domestic animal control   | 17.9% (29)  | 50.0% (81) | 32.1% (52)     | 2.14    | 162            |
| Vacation Rentals  | 33.5% (54)  | 46.6% (75) | 19.9% (32)     | 1.86    | 161            |
| answered question   |             |            |                |         | 163            |
| skipped question  |             |            |                |         | 1              |



| 8. What other very important topics should the Fort Valley Highway 180 planning committee consider? |                  |                |
|---|------------------|----------------|
|   | Response Percent | Response Count |
|   |                  | 38             |
| answered question   |                  | 58             |
| skipped question  |                  | 56             |

| 9. Of the topics listed above in question #7 or #8, which represent your top 3 concerns for the planning area and why? |                  |                |
|--|------------------|----------------|
|  | Response Percent | Response Count |
| First  | 100.0%           | 148            |
| Second   | 98.0%            | 143            |
| Third  | 95.3%            | 141            |
| answered question  |                  | 148            |
| skipped question   |                  | 18             |

| 10. Are there any special characteristics in the planning area that should be maintained or enhanced? |                  |                |
|---|------------------|----------------|
|   | Response Percent | Response Count |
|   |                  | 103            |
| answered question   |                  | 103            |
| skipped question  |                  | 59             |

| 11. How important are the following issues related to National Forest management in areas immediately surrounding the Fort Valley Highway 180 Corridor? |             |            |                |                |                |
|---|-------------|------------|----------------|----------------|----------------|
|   | Unimportant | Important  | Very Important | Rating Average | Response Count |
| Wild fires  | 0.0% (0)    | 15.9% (22) | 83.1% (133)    | 2.83           | 160            |
| Dispersed camping   | 9.4% (15)   | 50.9% (81) | 39.6% (60)     | 2.30           | 159            |
| Off-road vehicle use  | 9.2% (13)   | 25.8% (41) | 64.0% (105)    | 2.58           | 159            |
| Discharging of firearms   | 16.1% (25)  | 30.8% (49) | 53.1% (84)     | 2.49           | 159            |
| Forest fuel management  | 1.8% (3)    | 28.1% (45) | 70.0% (112)    | 2.68           | 160            |
| Livestock grazing   | 30.8% (48)  | 42.5% (68) | 26.9% (43)     | 1.96           | 160            |
| Land exchanges  | 9.4% (15)   | 32.7% (52) | 57.9% (92)     | 2.48           | 158            |
| Wildlife habitat  | 2.1% (3)    | 23.1% (37) | 73.8% (118)    | 2.71           | 160            |
| Experimental Forest   | 15.0% (25)  | 51.3% (81) | 32.1% (50)     | 2.18           | 158            |
| Buildings   | 28.6% (41)  | 32.8% (51) | 20.8% (32)     | 1.94           | 154            |
| answered question   |             |            |                |                | 160            |
| skipped question  |             |            |                |                | 4              |

| 12. Of the topics listed above in question #11, which represent your top 2 concerns for the planning area and why? |                  |                |
|--|------------------|----------------|
|  | Response Percent | Response Count |
| First  | 100.0%           | 148            |
| Second   | 96.8%            | 143            |
| answered question  |                  | 148            |
| skipped question   |                  | 18             |

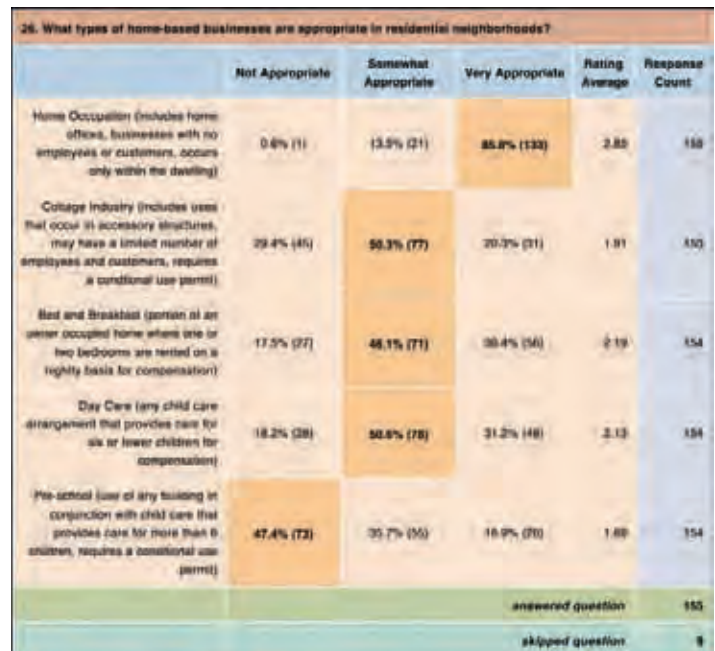
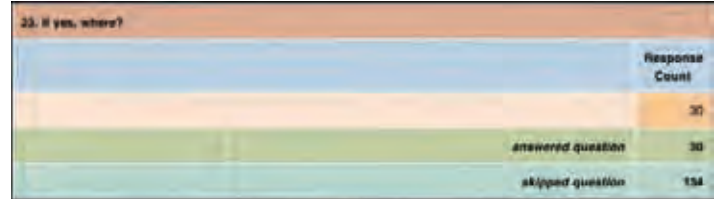
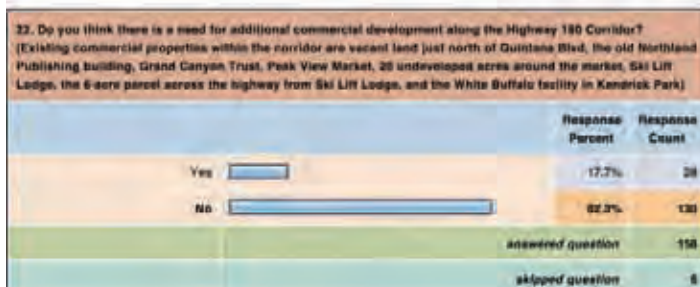
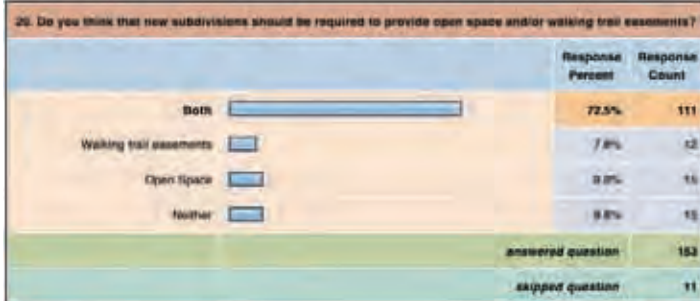
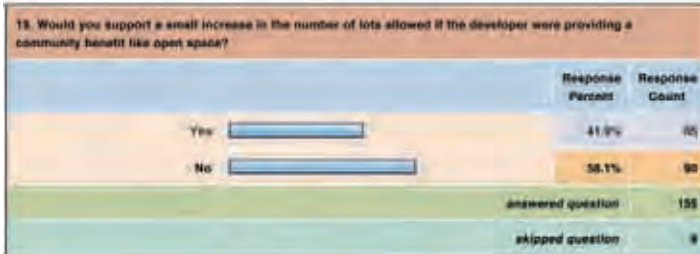
| 13. Which do you prefer for residential development in the planning area? (Subdivisions require approval through a public hearing process and are required to provide a minimum level of infrastructure for each lot depending on the size of lots created. Lot splits are done by administrative approval, can create up to 5 parcels and require no infrastructure). |                  |                |
|--|------------------|----------------|
|  | Response Percent | Response Count |
| Subdivisions   | 65.8%            | 98             |
| Lot Splits   | 34.2%            | 51             |
| answered question  |                  | 149            |
| skipped question   |                  | 15             |

| 14. Would you be willing to support a small increase in the number of lots allowed in order for the developer to pay for the infrastructure (paved roads, water, etc.)? |                  |                |
|---|------------------|----------------|
|   | Response Percent | Response Count |
| Yes   | 31.8%            | 50             |
| No  | 68.2%            | 107            |
| answered question   |                  | 157            |
| skipped question  |                  | 7              |

| 15. Would you support increasing density for residential use within the planning area? |                  |                |
|--|------------------|----------------|
|  | Response Percent | Response Count |
| Yes  | 27.2%            | 43             |
| No   | 72.8%            | 115            |
| answered question  |                  | 158            |
| skipped question   |                  | 6              |

| 16. If yes, what are the smallest lot sizes that would be acceptable? |                  |                |
|---|------------------|----------------|
|   | Response Percent | Response Count |
| Less than one acre  | 9.6%             | 9              |
| 1 acre to less than 2 acres   | 28.7%            | 27             |
| 2 acres to less than 3 acres  | 43.6%            | 41             |
| 3 acres or more   | 18.1%            | 17             |
| answered question   |                  | 94             |
| skipped question  |                  | 70             |

| 17. Would you support a subdivision request for smaller lots than currently allowed by zoning if the total number of lots allowed was consistent with the surrounding zoning? For example: 20 acres of land with 2 acre zoning could be split into ten parcels, what if 18 acres were retained as open space and 18 one acre parcels were proposed? |                  |                |
|---|------------------|----------------|
|   | Response Percent | Response Count |
| Yes   | 47.7%            | 74             |
| No  | 52.3%            | 81             |
| answered question   |                  | 155            |
| skipped question  |                  | 8              |





| 27. What are some of the enforcement and zoning violation problems in the area? |            |                      |                  |            |                |                |
|---|------------|----------------------|------------------|------------|----------------|----------------|
|   | No Problem | Somewhat Problematic | Very Problematic | Don't Know | Rating Average | Response Count |
| Junk vehicles   | 31.2% (48) | 48.9% (63)           | 11.0% (17)       | 16.9% (26) | 3.14           | 154            |
| Storage of second hand materials  | 34.2% (37) | 42.5% (55)           | 16.2% (26)       | 17.0% (26) | 2.26           | 163            |
| Construction without permits  | 26.4% (45) | 21.6% (33)           | 13.7% (21)       | 35.3% (54) | 2.65           | 163            |
| Setback violations  | 29.4% (45) | 19.6% (30)           | 10.5% (16)       | 45.3% (62) | 2.62           | 150            |
| Too many animals  | 44.7% (66) | 36.0% (40)           | 12.5% (19)       | 16.4% (20) | 2.01           | 152            |
| Easement obstructions   | 28.9% (44) | 18.4% (29)           | 9.2% (14)        | 43.4% (66) | 2.67           | 152            |
| Excessive/upward directed lighting  | 32.8% (50) | 24.7% (38)           | 20.8% (32)       | 22.1% (34) | 2.33           | 154            |
| Business in residential areas   | 48.3% (62) | 15.6% (24)           | 19.4% (18)       | 33.8% (52) | 2.38           | 154            |
| Vacation Rentals (homes rented for less than 30 days)                           | 43.8% (67) | 13.7% (21)           | 6.9% (10)        | 35.9% (50) | 2.35           | 153            |
| answered question   |            |                      |                  |            |                | 156            |
| skipped question  |            |                      |                  |            |                | 8              |

| 28. Is there a need for more or less enforcement of zoning regulations? |  |                  |                |     |
|---|--|------------------|----------------|-----|
|   |  | Response Percent | Response Count |     |
| More  |  | 37.2%            | 55             |     |
| Less  |  | 6.8%             | 10             |     |
| Same  |  | 56.1%            | 83             |     |
| answered question   |  |                  |                | 148 |
| skipped question  |  |                  |                | 16  |

| 29. Is there a need for a public park in Fort Valley Highway 180 Corridor planning area? |  |                  |                |     |
|--|--|------------------|----------------|-----|
|  |  | Response Percent | Response Count |     |
| Yes  |  | 31.6%            | 50             |     |
| No   |  | 43.8%            | 68             |     |
| Don't Care   |  | 25.2%            | 40             |     |
| answered question  |  |                  |                | 158 |
| skipped question   |  |                  |                | 6   |

| 30. If yes, where? |  |                  |                |     |
|--------------------|--|------------------|----------------|-----|
|                    |  | Response Percent | Response Count |     |
|                    |  |                  |                | 46  |
| answered question  |  |                  |                | 46  |
| skipped question   |  |                  |                | 118 |

| 31. Would you be willing to pay a special assessment for any of the following in the Fort Valley Highway 180 Corridor area? |            |             |                |
|---|------------|-------------|----------------|
|   | Yes        | No          | Response Count |
| Conservation Easements  | 41.9% (60) | 58.1% (90)  | 150            |
| Easements to access public lands  | 29.5% (46) | 70.5% (110) | 156            |
| Public parks  | 26.5% (41) | 73.5% (114) | 156            |
| answered question   |            |             | 156            |
| skipped question  |            |             | 8              |

| 32. Should more of the roads in the planning area be paved? |  |                  |                |
|---|--|------------------|----------------|
|   |  | Response Percent | Response Count |
| Yes   |  | 29.7%            | 47             |
| No  |  | 43.7%            | 69             |
| Don't Care  |  | 26.5%            | 42             |
| answered question   |  |                  | 158            |
| skipped question  |  |                  | 6              |

| 33. If yes, which ones |  |                  |                |
|------------------------|--|------------------|----------------|
|                        |  | Response Percent | Response Count |
|                        |  |                  | 43             |
| answered question      |  |                  | 42             |
| skipped question       |  |                  | 122            |

| 34. If you live on an unpaved road, would you be willing to pay a special assessment to pave the road? |  |                  |                |
|--|--|------------------|----------------|
|  |  | Response Percent | Response Count |
| Yes  |  | 14.8%            | 23             |
| No   |  | 43.9%            | 68             |
| Not Applicable   |  | 41.3%            | 64             |
| answered question  |  |                  | 155            |
| skipped question   |  |                  | 9              |

| 35. If yes, how much? |  |                  |                |
|-----------------------|--|------------------|----------------|
|                       |  | Response Percent | Response Count |
| \$5,000 - \$10,000    |  | 65.4%            | 17             |
| \$10,000 - \$15,000   |  | 23.1%            | 6              |
| \$15,000 - \$20,000   |  | 3.8%             | 1              |
| \$20,000 - \$25,000   |  | 7.7%             | 2              |
| \$25,000 +            |  | 0.0%             | 0              |
| answered question     |  |                  | 26             |
| skipped question      |  |                  | 138            |

| 36. If you live on an unpaved road, would you be willing to pay a special assessment for dust abatement or other types of road improvements not including paving? |  |                  |                |
|---|--|------------------|----------------|
|   |  | Response Percent | Response Count |
| Yes   |  | 18.8%            | 27             |
| No  |  | 42.4%            | 61             |
| Not Applicable  |  | 38.9%            | 56             |
| answered question   |  |                  | 144            |
| skipped question  |  |                  | 20             |

| 37. If yes, how much? |  |                  |                |
|-----------------------|--|------------------|----------------|
|                       |  | Response Percent | Response Count |
| \$500 - \$1,000       |  | 77.8%            | 21             |
| \$1,000 - \$2,500     |  | 11.1%            | 3              |
| \$2,500 - \$5,000     |  | 7.4%             | 2              |
| \$5,000 +             |  | 3.7%             | 1              |
| answered question     |  |                  | 27             |
| skipped question      |  |                  | 137            |

| 38. If yes, where? |  | Response Count |
|--------------------|--|----------------|
|                    |  | 20             |
| answered question  |  | 20             |
| skipped question   |  | 144            |

| 39. Do you think there is a need for additional traffic enhancements along the Highway 180 Corridor? |  |                  |                |
|--|--|------------------|----------------|
|  |  | Response Percent | Response Count |
| Yes  |  | 48.7%            | 73             |
| No   |  | 43.3%            | 65             |
| Don't Care   |  | 8.0%             | 12             |
| answered question  |  |                  | 150            |
| skipped question   |  |                  | 14             |

| 40. If yes, what kind and where? |  | Response Count |
|----------------------------------|--|----------------|
|                                  |  | 73             |
| answered question                |  | 73             |
| skipped question                 |  | 81             |

| 41. Do you have any other comments you would like to share? |  | Response Count |
|---|--|----------------|
|   |  | 73             |
| answered question   |  | 73             |
| skipped question  |  | 81             |



